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Second *ad interim* Report of the Advisory Committee dealing with the Back Bay Reclamation Scheme

FIRST EDITION

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BOMBAY BRANCH
OF THE
Royal Asiatic Society.

SECOND "AD INTERIM" REPORT OF THE ADVISORY COMMITTEE TO THE DEVELOPMENT DIRECTORATE ON THE REFERENCE MADE TO IT BY GOVERNMENT IN LETTER No. S. D.—1313, DATED 25TH AUGUST 1924, FROM THE ACTING SECRETARY TO GOVERNMENT, DEVELOPMENT DEPARTMENT (APPENDIX A).

1. Under the terms of reference the Committee are to enquire into the activities of the Development Department and to report to Government as to how far, and in what directions, such activities should be continued or eliminated. The report now submitted deals with the Back Bay Reclamation Scheme.

2. The Committee for the purpose of this inquiry, hereafter referred to as the Special Committee, consists of the Advisory Committees for Bombay City and the Bombay Suburban Division (Appendix B) with the addition of Mr. A. N. Surve, M.L.C., who was appointed an additional member under Government Resolution No. S. D.—9, dated the 5th January 1925, for the special purposes of this investigation.

BACK BAY RECLAMATION SCHEME.

3. The areas concerned in the Back Bay Reclamation Scheme are as follows :—

	Acres.
To be reclaimed	1,145
To be sold to the Military Department undeveloped at Rs. 20 per square yard	265
Roads and open spaces	426
Net building area	454
	(say, 22 lakhs square yards).

4. In an *ad interim* report submitted on the 17th February 1925 the Special Committee stated their intention to appoint a sub-committee to examine the financial prospects of the scheme in detail, and recommended that, pending the submission of their final report, the work should be proceeded with. A sub-committee was accordingly appointed, the members being Mr. Manu Subedar, Mr. R. H. A. Delves and the Chairman, with power to co-opt Mr. A. V. V. Aiyar, Deputy Controller of the Currency and Financial Adviser to the Development Department. The report of the sub-committee is printed as Appendix C to this report. It will be seen that the sub-committee were unable to present a unanimous report, and submitted a majority report signed by the Chairman, Messrs. Delves and Aiyar, with a minority report signed by Mr. Manu Subedar.

5. In paragraphs 1—6 of the majority report a brief resumé of the position is given as it stands at present, based on the actual output of the dredging plant during the working season of 1924-25. The scheme consists essentially of two parts: (1) the construction of a sea-wall, and (2) the filling of the area enclosed by it. So far as (1) is concerned, no excess over the provision in the project estimate is anticipated. It is in regard to the filling of the area that trouble has arisen. Government undertook the scheme on the advice of Sir George Buchanan, K.C.I.E., who estimated that the filling could be completed in 5 years by means of a suction dredging plant, the purchase of which he recommended, which would be capable of reclaiming the area by dredging from the harbour at the rate of 2,000 cubic yards per pumping hour. The plant was accordingly ordered to the specification of Messrs. Meik and Buchanan, and to the designs of the Consulting Naval Architect to the India Office who, on its completion, after trials on the Clyde, certified the plant to be capable of the specified output, and formally took it over on behalf of Government.

6. Sir George Buchanan's estimate of the cost of filling the area has proved to be seriously at fault for two reasons :—

(*a*) That the whole of the material required cannot be obtained from the harbour, because the area which Sir George Buchanan proposed to dredge over has had to be curtailed to meet the reasonable objections of the Royal Indian Marine and the Bombay Port Trust. The balance of material required has now consequently to be obtained from Back Bay involving a further outlay of Rs. 28 lakhs on additional plant.

(*b*) That in actual practice it has not been possible up to date to obtain more than about 25 per cent. of the specified output of the dredger as actual filling, and, unless an improvement in the performance of the plant can be obtained, it is probable that, including the increased cost referred to in (*a*) above, the total cost of the work will be in the neighbourhood of Rs. 11 crores, exclusive of interest.

7. With reference to (*a*) the Special Committee consider that a grave initial error was made in the failure to consult the Bombay Port Trust concerning the area proposed to be dredged over in the harbour, although the Port Trustees, as conservators of the Port, were vitally interested in the proposed operations.

8. As regards (*b*) the Special Committee understand that the suction dredgers "Kalu" and "Jinga", employed by the Bombay Port Trust from 1909 to 1913 on the Mazagaon-Sewri reclamation, were similar to the plant ordered for the Back Bay Reclamation and were constructed by the same makers, Messrs. William Simons and Company of Renfrew. They were also designed to dredge and discharge at the rate of 2,000 cubic yards per hour, but never, in practice, attained that figure. The Special Committee find it difficult to understand why Government failed to avail themselves of the experience of the Port Trust Engineers, before accepting the estimates of Sir George Buchanan. With a practical example of a similar work at their doors, data were available which would, it must be thought, have dictated caution, and have led to a further examination of the project before it was decided to proceed with it.

9. The Special Committee cannot avoid the conclusion that Government might well have exercised greater prudence in these matters. At the same time Sir George Buchanan was the expert adviser, reputed to have great practical experience in the operation of suction dredging plant, and the Special Committee are of opinion that the main responsibility must rest with him for the predicament with which Government is now confronted.

10. As regards the advice called for from the Special Committee under the terms of reference, after a careful consideration of the report of the Sub-Committee, the Special Committee find themselves in agreement with the recommendations of the majority of the sub-committee, *viz.*, "that work on the sea-wall should be stopped for the present, and all efforts concentrated on the completion of blocks 1, 2 and 8 employing 2 trains of dry filling per day to supplement the dredging, first in block 8 until completion, and then in blocks 1 and 2. That the question of continuing and completing the whole reclamation should be reconsidered in 1927-28, when the dredging in block 8 will be approaching completion, and when further experience of the working of the plant will have been gained". The Special Committee accordingly accept and adopt the majority report of the Sub-Committee.

11. They consider that it has been clearly shown in that report that by completing blocks 1, 2 and 8 a substantial reduction of debt can be effected, compared with the loss which would be incurred by closing down the work now. The Special Committee agree that the prospects of the disposal of land in blocks 1 and 2 are difficult to forecast, but they observe, from statements I and II attached to the majority report, that the present value of the proceeds of sale of block 8 to the Government of India, amounting to Rs. 189 lakhs, will alone more than cover the present value of the estimated cost of completion of blocks 1, 2 and 8 after 1st October 1925. Allowing for the present value of the sale proceeds of plant, Rs. 25½ lakhs, there would be a gain of about Rs. 55 lakhs, even if no land in blocks 1 and 2 were sold at all.

12. Besides reducing the loss on the scheme, the completion of blocks 1, 2 and 8 will provide the Military Department with the land they require at Colaba, whilst the Bombay public will secure an additional recreation ground of over 50 acres in extent, in block 1, together with a promenade and marine drive, a mile in length.

13. By the time the decision has to be made as to the advisability or otherwise of completing the whole scheme, further experience with the dredging plant will have been gained, and fuller data will be available on which to base final conclusions.

14. In adopting the majority report of the Sub-Committee the Special Committee have assumed the reasonable accuracy of the Chief Engineer's forecast of expenditure after 1st October 1925, for the completion of blocks 1, 2 and 8, on which statements I and II attached to the Majority Report are based. They suggest, however, for the consideration of Government that this estimate should be checked by a small committee of local Engineers appointed for the purpose.

15. A further suggestion the Special Committee desire to make is in regard to the proposed recreation ground in block 1. Without committing themselves to any definite recommendation on the subject, they would draw the attention of Government to the fact that, if considered desirable, the financial position might be still further retrieved, if a part of this area were sold as building sites.

(Signed) H. A. L. HEPPER.
„ W. H. NEILSON.
„ R. H. A. DELVES.
„ E. C. REID (subject to minute of dissent).
„ C. J. HANSOTI (subject to my minute).
(Signed) H. ST. C. SMITH, „ L. U. MONGINI.
Secretary. „ JANMEJAY CHHABILDAS.
„ JEHANGIR BOMANJI PETIT (subject to minute).
21st January 1926.

Minute of dissent by Mr. E. C. Reid.

I have signed the majority report because I am in general agreement with its recommendations, but I do so subject to the following reservations.

I do not consider that paragraph 14 of the report goes far enough. In the light of the bitter experiences of the past I consider it essential that the Chief Engineer's forecast of expenditure after 1st October 1925, for the completion of blocks 1, 2 and 8, should be checked by an independent firm of consulting engineers who have hitherto been entirely dissociated from the activities of the Development Directorate.

In view of the fact that the Special Committee are unable to agree upon the recommendation that should be made to Government and in order to restore public confidence in the conduct of the Back Bay Reclamation Scheme I consider that the papers should be referred to a fresh and independent Committee for consideration *de novo* with a view to submitting representative recommendations to Government. I would suggest that this Committee be composed of—

two or three Executive Ministers of Government;
two or three Members of the Legislative Council;
representatives of the Chamber of Commerce, the Indian Merchants' Chamber, the Millowners' Association, the Municipality, the Improvement Trust, the Port Trust, and the military authorities and the Royal Indian Marine.

In the meantime I agree that work on blocks 1, 2 and 8 should be proceeded with.

Minute by Mr. C. J. Hansoti.

1. I am of opinion that blocks 1 and 2 should not be taken up until experience of work in block 8 shews that the work in the former can be done within the cost estimated by the Sub-Committee.

2. I would at the same time suggest that steps be taken to assist as far as possible the silting that takes place in the remaining area and to prevent excessive scour where the sea-wall is left incomplete.

3. Again, in view of paragraph 8 of the report I would advise Government to institute enquiries with a view to apportion responsibility for the failure of the dredger and if possible to recover damages from the manufacturers and others

concerned, as the order for such an extremely costly piece of machinery cannot be conceived to have been placed without proper guarantees for its performance at its place of destination.

Minute by Mr. J. B. Petit.

I agree that the best way in which to get out of the deplorable situation with a minimum amount of loss is to follow the recommendation contained in paragraph 10 of the Majority Report which I therefore sign. But the question of the responsibility for having landed the department in such a predicament has not been touched upon by the Committee ; and I cannot help thinking that, in view of the manner in which the entire proceedings connected with this Department were rushed through in the face of emphatic public protests, it is of the utmost public importance that the question of responsibility should not be slurred over, in order at least to avoid a repetition in the future. I also think, that the Government owe it to themselves and the public to make a clear and unequivocal declaration at the earliest possible moment, giving all the facts and if possible allocating the exact responsibility for this result to the person or persons concerned, however highly placed.

Minority report on the Back Bay Reclamation Scheme.

We regret we cannot sign the Majority Report. We observe that the report registers the decision arrived at by Government without waiting for the opinion of the Special Committee. The Majority recommend " that the work on the sea-wall should be stopped at present, all efforts concentrated on the completion of blocks 1, 2 and 8 employing 2 trains of dry filling per day to supplement the dredging, first in block 8 until completion, and then in blocks 1 and 2 ". (*Vide* paragraph 10.) We find that work on the sea-wall has stopped, and that dry filling of blocks 1, 2 and 8 has been in progress for some time supplemented by debris filling of blocks 1 and 2 with the material obtained from the Improvement Trust. Apart from the question of courtesy or confidence, this kind of intelligent anticipation undermines the utility of the Committee, and makes the whole procedure, more or less, farcical.

2. Seven voted for the majority report, including Mr. Reid, representing the Chamber of Commerce. Had he voted with the Minority, the majority would have become the minority. Considering Mr. Reid's draft report substantially accords with the views of the minority contained in paragraph 15 it appears desirable to us to quote the relevant part of Mr. Reid's draft report : " The members of the Special Committee find themselves unable to agree upon the recommendation that should be given to Government, but as they take a very serious view of the present state of the Back Bay Reclamation Scheme they consider it advisable in the interests of all concerned that Government appoint an entirely independent Committee consisting of say—

two or three Executive Ministers of Government ;
two or three Members of the Legislative Council ;
representatives of the Chamber, Indian Merchants, Millowners, Municipality, Improvement Trust, Military and Indian Marine,

with a view to representative recommendations being made to Government."

3. It is true that, under the terms of reference, the Committee are to inquire into the activities of the Development Department, and to report to Government as to how far and in what directions, such activities should be continued or thoroughly eliminated. We regret that the Committee have not been able to enquire into the activities of the Development Department. We also feel that the Majority Report has put too narrow a construction on the terms of the reference. The Special Committee is not a Royal Commission constrained to keep strictly within the terms of the reference. As a matter of fact it has gone outside the terms of the reference in apportioning blame between the Government and Sir George Buchanan in paragraph 9 of the Report and in speculating about the jurisdiction of the Municipality over the reclaimed area in paragraph 21 of the Sub-Committee's report. The Committee would have exercised a wise discretion if it had explored the subject in all its ramifications. The Committee could then have produced a much more illuminating report for the information of Government and the Legislative Council and the edification of the tax-payer.

4. We are of opinion that Government were not justified in proceeding with the scheme without the sanction of the Legislative Council the moment they realised that the expert and amateurish advisers of Government had gone hopelessly astray in their calculation of the cost of the reclamation. The project sanctioned by Government in October 1922 was the reclamation of 1,145 acres to be completed in 5 years at the total cost amounting to Rs. 7,02,43,321 nett (Rs. 775 lacs). It is now admitted that " the filling will take 4 times as long and cost 4 times as much ". at the estimated " cost of the whole scheme at Rs. 11 crores and the date of completion 1944-45 ". (*Vide* paragraphs 2, 5 and 6 of the Sub-Committee's Report). The inefficiency of the dredgers was known during the working season of 1923-24 when " the actual output had been very considerably less " (*vide ibid* paragraph 5). Admittedly, it has never exceeded 25 per cent. of " the specified output " of the dredger. This accorded with the experience of the Port Trust whose dredgers were constructed by the same makers, Messrs. William Simons and Company of Renfrew and were " designed to dredge and discharge at the rate of 2,000 cubic yards per hour but never in practice attained that figure." We are told that the actual figure never exceeded 50 per cent. of the specified output. With such available data, the Directorate and the Government were not justified in neglecting to take the Council and the public into confidence and in maintaining the silence of the Sphinx.

5. The report virtually recommends :—" Go on with the scheme at full speed. Reconsider the situation at the end of 1927-28 in the light of experience. Meanwhile provide for the liquidation of the inevitable dead loss. " This is not the language used. It is concealed in camouflage. But there ought to be no difficulty in realising the true nature of the recommendation. The dredgers are to work at their highest point of efficiency. This is to be supplemented by " employing 2 trains of dry filling per day ". It is only with this double activity that the " dredging in block 8 will be approaching completion in 1927-28 ". What else could be done if the report had simply said : " Go on with full speed *plus* dry filling ". The liquidation is mentioned in paragraph 23 of the Sub-Committee's report. The figure is not mentioned, but on the most optimistic basis according to the majority it would vary from Rs. 281 lakhs to Rs. 369 lakhs.

6. We have a shrewd suspicion that the Directorate have made up their minds to abandon the original scheme as financially impractical. It is impossible for them to confess such a colossal collapse of their ambitious project. Moreover, such a confession would be an insurmountable obstacle in the underlying design of their present proposal. The underlying object is to complete the reclamation of Block No. 8 for the Military Department at the contracted price of Rs. 239·09 lakhs or 247 acres at the average rate of Rs. 20 per square yard, or Rs. 189 lakhs at less than Rs. 16 per square yard in terms of the present value (*i.e.*, in October 1925). The estimated cost according to the Directorate will be something between Rs. 19·48 and Rs. 21·20 per square yard. This is a very different story from the roseate picture drawn by the Directorate in the Report of 1921-22. Then they were confident that " that the total cost of the reclamation at the time of the transfer of land to the Military Department including interest will be Rs. 618 lakhs equivalent to Rs. 11 per yard and as the figures are believed to be an overestimate, it is not in the least likely that Government will lose having fixed the cost price at Rs. 20. In any case Government will receive from the Military Department for the whole area about double of what the land will at the date cost them ". All this has gone wrong. In all likelihood the Directorate would spend not Rs. 618 lakhs on the whole scheme but over Rs. 800 lakhs for completing blocks 1, 2 and 8 only.

7. The report recommends that " all efforts be concentrated on the completion of blocks 1, 2 and 8 employing 2 trains of dry filling per day to supplement the dredging, first in block 8 until completion, and then in blocks 1 and 2. That the question of continuing and completing the whole reclamation should be reconsidered in 1927-28 when the dredging in block 8 will be approaching completion ". The dredging with dry filling in blocks 1 and 2 was not to commence before the end of 1927-28. It appeared therefore to be unnecessarily complicating matters by importing considerations concerning blocks 1 and 2 at present instead of relegating it to 1927-28. The light of experience may suggest the total abandonment of the incompleted scheme including blocks 1 and 2 at the end of

1927-28. It might upset all the combinations and permutations of statements I and II. It would have been reasonable to confine calculations to block No. 8 but unfortunately Government have decided and are actively going on with the reclamation of blocks 1, 2 and 8 instead of concentrating all dredging and dry-filling in Block No. 8 until completion. We do not know on what date Government came to the decision to proceed with blocks 1, 2 and 8 simultaneously.

8. We have no confidence whatever in the forecasts now submitted. A brief history of the scheme will justify our scepticism. The foreshore of Back Bay with its graceful curve, refreshing zephyrs and oceanic outlook is capable of conversion into the most beautiful "beauty spot" in the World with grand beulevards, marinas, parks and up-to-date amenities. The idea of reclamation has, therefore, survived, the shock of the Share Mania, and was probably stimulated by the comparative cheapness of the Cuffe Parade. It appears that in January 1911 the Government of Bombay submitted a Reclamation scheme to the Government of India for sanction. "The Government of India replied on the 14th October 1911, and said that before any representation could be made to the Secretary of State they must be satisfied that the works would be reproductive, and for that purpose there were practically no data available. The Government of India did not wish to question the accuracy of the *skilled engineers* who had advised the Government of Bombay, but their *figures had not been placed* before the Government of India, and all that could be said on a general review of the case that *large estimates* of that type were particularly liable *to be exceeded* and that even in Bombay *experience of that type of reclamation* on an open sea front, was *limited.* On the proposal that the scheme if undertaken, should be executed by *Government in preference to private agency* the Government of India were *not convinced* on the information before them that the scheme, if undertaken, should be executed by Government in preference to private agency, and asked that the matter should be further investigated and finally they enquired what would be the cost of the detailed surveys and estimates which would be necessary before the scheme could be recommended to the Secretary of State." The italics are ours. It is a misfortune that Government did not take to heart the warning that large estimates of the type were liable to be exceeded, and did not accept the wisdom of the advice to prefer private agency to Government. It will be observed that local experience was pleaded in support of the scheme. It is not clear whether the cost of detailed surveys and estimates was submitted to the Government of India,but Messrs. Lowther and Kidd were engaged to make a survey and prepare the estimates. The cost of the project was estimated by them at Rs. 5·68 per square yard, and though the Committee of 1912 reported favourably on it, the Government of India rejected the project, and were prepared to sanction the reclamation of a small portion only consisting of 84 acres at a cost of Rs. 37 lacs. The subject was further examined by the Bombay Development Committee. Conflicting views were expressed before the Committee. Curiously enough, Sir Lawless Hepper who preferred the development of Salsette to "the reclamation of any large additional areas from the sea" is now Director of the Development Department and the Hon'ble Mr. Cowasji Jehangir who believed that investors who "have burnt their fingers on the Cuffe Parade" and "the public will not come forward in any numbers to build on the proposed reclamation" is now Member in charge of this Department. The crux of the question was the cost of reclamation. Eventually the Committee recommended reclamation of a small area of 100 acres. In 1917 the Government of India for the third time turned down the proposal of the Government of Bombay and would not sanction the reclamation of even such a small portion as 220 acres. "It required a man of bold conception, of courage and sufficient driving force to put through a bold scheme, and fortunately for Bombay we got such a man in our Governor, Sir George Lloyd. It took a considerable time, Sir, to outline the activities intended and to obtain the sanction of the higher authorities, the Government of India and the Secretary of State to this project. Ultimately the sanction was obtained and the Department was organised somewhere in October or November last year." (Per Sir Chimanlal Setalvad, *Vide* Council speech on 14th March 1921). Sir George Buchanan now appears on the scene. In September 1919 he reports that the nett outlay on the scheme for reclaiming 1,145 acres would be Rs. 367·61 lacs. Upon the strength of this report, the Government of Bombay, on the 4th December 1919, wrote as follow :—"The Governor in Council is confident that the Government of India

will have little hesitation in accepting Sir George Buchanan's opinion. I am to add that the Governor in Council is prepared in view of possible increase of rates of labour or materials to add 10 per cent. to the total cost of the scheme as estimated by Sir George Buchanan and the total cost of the project may be roughly taken at Rs. 4 crores for the purposes of finance." Upon this representation the sanction of the Government of India and the Secretary of State was obtained in 1920. No time was lost in piloting through the Council a Bill authorizing Government to raise a loan for the reclamation in August 1920. Referring to this hurried passage of the Bill, Mr. (now Sir) Purshottamdas Thakurdas on 15th July 1921 said that " the Select Committee appointed by the Council did their utmost to get the Bill through at the concluding session last September as it was considered desirable that it should be passed at that time as otherwise it would have had to come before the New Council, which every one thought would require some time for settling down." Clearly the sanction was exacted on the basis of 4 crores. No variation in this estimate was indicated on the 14th March 1921 when Sir Chimanlal placed it at the same figure at the rate of Rs. 10 per square yard in the Legislative Council at the time of the first budget of the Development Department. Since March 1921 the prices of labour and material *had not perceptibly* increased. Nevertheless in September 1921 Sir George Lloyd suddenly raises the estimate to 702 lakhs in his information to the Indian Merchants' Chamber. It was a big jump from Rs. 400 lakhs to Rs. 702 lakhs. No sanction of the Government of India was solicited on the ground that it had become superfluous under the powers of the Reform Act of 1919. The Government assumed the responsibility of sanctioning the project in October 1922 without consulting the Government of India or the New Council. The loan Bill was hastened through the Old Council as the passage through the New Council would not be smooth sailing. The project was sanctioned under the reformed powers by ignoring the reformed Council. A special department was organised to keep it out of a responsible minister in charge of the transferred subjects. We are unable to penetrate through the motives of these manœuvres, but we are strongly of opinion that the Government of India should have been consulted and also the New Council. The reason why this was not done appears to be that the Government of Bombay was hopelessly committed to the scheme even before the sanction of October 1922.

9. The report of 1920-21 contains the following :—

" Report received from India office up to 31st March 1921 shows that good progress has been made on the dredger and the intermediate pumping station. The pipe lines both floating and shore are also progressing, and it is expected that some parts will be shipped shortly. The dredger is timed to arrive after the monsoon of 1922 when it is expected to have a compartment of the reclamation area ready for filling." As a matter of fact the dredger " Sir George Lloyd " arrived before the monsoon of 1922 on the 31st March 1922. The Government were then inextricably committed to the scheme, and for this reason an optimistic propaganda became indispensable. Sir George Curtis on July 15th, 1921 said before the Royal Society of Arts :—" Great secrecy in the plans of Government was essential and when His Excellency placed the proposal before the Council, it took the Council and the public by surprise. Accordingly it was decided to start a propaganda explaining exactly what the various projects were and the paper which I am about to read forms part of it." There was no reason for secrecy as scarcely any property on the foreshore of Back Bay was to be acquired. Even St. Nihal Singh was mobilised. We do not know what expenses were incurred for and what purpose was to be served by this unworthy propaganda. But we now enter upon an era of optimism unparalleled by the maddest delirium of the share mania. The cost per square yard had jumped from Mr. Kidd's Rs. 5·68 per square yard exclusive of interest of 1912 to Rs. 28 in 1922 and repeated with optimistic confidence by the Honourable Mr. Cowasji Jehangir on 10th March 1924 in Council in these memorable terms :—" I can tell you ..... that the land on the Reclamation when it is first ready for sale, will cost this Government Rs. 28 a square yard is a statement I am prepared to repeat today and it is a statement, I hope, I or my successor may be able with confidence to repeat when the Reclamation is completed." It is a case of living in hope and dying in despair for the chalice of hope has already changed into the cup of gall. We cull a select sample of the quality of the propaganda set on foot. " Sir George

Buchanan on a very conservative estimate of land values .... confidently believes that not only will the reclaimed work pay for itself but there will be a handsome surplus from sales." (Propaganda note on Back Bay Reclamation by Sir George Buchanan, price 2*d.*). This is cautious compared with Sir Chimanlal Setalvad's "Now taking the present valuation of land in the City, on a very modest estimate the result of the reclamation would be a profit of at least thirty crores of rupees to the City. It may be more, in all probability it will be more and in certain circumstances it may even go to fifty crores." Of course this was not in terms of present values, for present values would reduce ultimate profits to smaller dimensions. Present values are no doubt good for purposes of comparison, in the case of engineers, accountants, mathematicians, but they deceive laymen who imagine that the present values are the true figures of the ultimate losses whereas the ultimate figures may be ten times larger depending upon the final date of completion. Under the influence of Sir Chimanlal's fabulous figures it is no wonder that Mr. Cadell in February 1924 was able to say that this was no "wild cat scheme" for "private financiers were tumbling over one another to get concession from Government." "If the concession had been given to a private company .... there would have been speculation and inflation in the prices of the shares, with the inevitable sequence of depression, ruin and widespread disaster. The ruin would have been hundred times worse than that which followed the share mania of the siatics." This made no impression on Mr. Lalji Naranji. If there be "an offer of Rs. 50 per square yard of the Back Bay Reclamation" said he "let it be brought. It is merely bluffing the public. I will challenge the Government Member to bring out the offer." The challenge was not accepted, but it stung Sir Lawless to the quick who retaliated :—"It must be recognised for it cannot possibly be concealed, that there are powerful vested interests in Bombay which are and must be from their very nature, definitely hostile to any measures calculated to bring about a general reduction in the value of land in the City." (Budget speech 10th March 1924). On 24th October 1924 Sir Lawless Hepper fired another volley :—"You will have damaged Back Bay without replacing it by the new and equally beautiful curve which the Reclamation Scheme gives it. The marine drive, the open spaces and playing grounds will never materialise ; nor will sites for residence for officers and public buildings. To stop the reclamation would now mean to throw away all the money that has been spent, to abandon all possibility of profit, or even recovering expenditure incurred and to deny to future generations the room for expansion and the amenities which this great scheme is designed to afford". With all the internal knowledge at his disposal it was rather audacious on the part of Sir Lawless Hepper to attribute ignoble motives of vested interests to honest critics but perhaps offensive tactics in hostile camps is better than purely defensive tactics. On a former occasion he had let the cat out of the bag when he said :—"I am not prepared to say what the actual cost of land on the reclamation is going to be" (*vide* speech February 1924). The significance of these words was not comprehended at the time. But in February 1925 he assured Mr. Baptista on the eve of the *ad interim* report that all was well and this assurance was conveyed in the report in these terms :— "In regard to the possibility of financial loss, the expenditure has, up to date, approximated closely with the forecast, the total including interest charges to 31st March 1924 being Rs. 412·39 lacs against the forecast figure of Rs. 421·16 lacs." This obviously meant that the work done kept pace with the money spent according to programme. But the conflicts behind the scenes were not revealed to a trusting Committee till a later date. In a departmental note of 27th January 1925, Sir Lawless Hepper estimates the net outlay of Rs. 880 lacs. We cannot divine what scruples of conscience, moral or economic, constrained Sir Lawless to withhold this note from the Committee whose blissful ignorance thereof left them no option but to sign the *ad interim* report in February 1925. But even 880 lacs mounted in no time to 1,103·73 lacs. With interest and receipts from military area this would work out at about Rs. 93 per square yard. This is a big and bitter pill to swallow but there may be bigger pills in store for us. We have no confidence whatever in the present estimates. They may be as worthless and deceptive as the estimates that have gone before. The expert advisers are unmasked as false prophets. Like the Honourable Mr. Cowasji's friends we have burnt our fingers badly. Under the circumstances we can only protest against the acceptance of any part of the majority recommendations and remind all concerned of the sage advice of the Government of India, "that large estimates of that type were particularly liable to be

exceeded " and that private agency is preferable to Government agency in schemes of such magnitude. *Sic transit gloria reclamationis.*

10. History has repeated itself. Government are faced with the fate that overtook the share maniacs of 1861. Humpty Dumpty was placed on the high pedestal of profits of 50 crores by Sir Chimanlal Setalvad. It was lowered to 4½ crores by Sir Lawless Hepper on the 17th September 1924 in a departmental note, then to 2 crores in the note of 27th January 1925, and finally to a dead loss of 3 crores or more by the Sub-Committee including Sir Lawless Hepper. Humpty Dumpty has had a big fall. Wise men and wise acres are all now silent about profits or profiteering. All are agreed about the dead loss of 488·67 lacs on the 1st of October 1925, if the works were closed on that date and the dredging and other plant fetched 45 lacs. There is no more tall talk about profits. The point at issue now is simply either to suffer a dead loss of 488 lacs after disfiguring the graceful Bay and substituting Lord Lloyd lake for breeding mosquitoes, or to embark upon the forlorn hope of reducing the loss by drastic changes in the time and method of completing the whole scheme or only parts thereof.

11. The position assumed is that the debt or loss on the 1st of October 1925 is 533·67 lacs. The proposals are based on this assumption. Already there is a change in the position as the Directorate has not stopped work or expenditure but has gone on as if nothing had happened without waiting for the views of the Committee. It means that whatever its views Government have resolved under the advice of the Directorate to proceed with full speed the dredging in of block Nos. 1, 2 and 8. This is not a very honourable position for the Committee to occupy, nor a very courteous treatment for their labour of love *pace* Rs. 30 per meeting. If the proposed date of completion is not realised, it would affect the calculation of the Engineers to some extent. With this general observation we proceed to examine the present proposals.

12. The Sub-Committee say that " having satisfied ourselves that a loss on the scheme is almost inevitable we have directed our inquiries to an examination of three possible alternatives ". The " almost inevitable " is an incredible piece of optimism after recommending the funding of a debt which according to statements I to V cannot be less than Rs. 281 lacs but may be more than Rs. 567 lacs in terms of the present value. It must be noted that a loss of 567 lacs in terms of present value, would in terms of the ultimate value in 1984-85 be 176 crores of rupees at the rate of 6 per cent. per annum.

13. There are five statements. Of these statements III, IV and V are forecasts for the completion of the whole scheme. Statement III reduces the debt from Rs. 533·67 lacs to 336 lacs (present value), statement IV to 337·36 lacs, and statement V to 367·89 to 567·56 depending upon the date of completion. But these statements need not be taken seriously. The Sub-Committee practically discredit them when they write :—

"At the same time we feel that the problem of forecasting the prospects of disposal of 22 lacs square yards, stretching from Church Gate to Colaba, offers much greater difficulties than that of dealing with 3·60 lacs square yards in the neighbourhood of Church Gate Station. We are not prepared, therefore, to make any definite recommendations in regard to completion of the scheme beyond blocks 1, 2 and 8 at this stage ". We regard this as an implied pronouncement against the scheme as a whole. It would have been better and more straightforward without the camouflage in paragraph 10 :– " That the question of continuing and completing the whole reclamation should be reconsidered in 1927-28, when the dredging in Block 8 will be approaching completion and when further experience of the working of the plant will have been gained ". We, therefore, do not think it worthwhile discussing the merits and demerits of these alternatives as we think that the whole scheme can never be completed on financial grounds. We shall proceed to consider the recommendation regarding blocks 1, 2 and 8.

14. Statements I and II refer to proceeding with the completion of blocks 1, 2 and 8. We are of opinion that the case of block 8 should have been separated from blocks 1 and 2 on the ground that there is a ready purchaser from whom a higher price might well be demanded under the circumstances than the contract price of Rs. 20 per square yard or Rs. 16 per square yard in terms of the value on 1st October 1925. The suggested separation would indicate

what would be the cost of completing block 8 with and without dry filling and what reduction in the debt it would effect. If all the dredging by both dredgers had been concentrated on block 8, there would be no necessity for the more expensive dry filling of block 8. There appears on the surface no risks beyond the vagaries of the dredgers. The Directorate could be abolished at once and the work transferred to the Public Works Department. We believe this block would reduce the debt by a crore or more. There would be something shown for the fortune buried in the Lloyd Lake.

15. We cannot accept the joint estimate concerning blocks 1, 2 and 8 taken together. The majority of the Committee have evidently little confidence in the Chief Engineer's estimate for they recommend that his estimates " should be checked by a small committee of local engineers appointed for the purpose ". How the majority can make this recommendation after this diffidence in the estimate of the Chief Engineer is beyond our comprehension. The wiser course would have been to make no recommendations whatever beyond advising the suspension of all work and a thorough examination of all the blundering and plundering by an independent and impartial committee of engineers who have had nothing to do with this extraordinarily miserable affair.

16. Scheme II is composed of two parts, *viz.*, block 8 for military purposes, and blocks 1 and 2 for sales. The contemplated layout assumes that there will be 3,60,000 square yards available in blocks 1 and 2 for sale at 20,000 square yards per annum at the rate of Rs. 60 per square yard for 18 years commencing with 1929-30 and ending with 1946-47.

17. There is no likelihood that these anticipations will materialise. The governing factor is the sale of 20,000 square yards per annum for Rs. 12 lakhs without intermission. Any undersales for the first five years will reduce the present value considerably. The Sub-Committee confess that there exists about 1,00,000 square yards of military land on Queen's Road which will compete directly with reclaimed land. Government have been unable to dispose of this land ready for building. Besides the military area there are other competing sites. The Committee declare:—" It cannot be denied that this very large area must in some degree affect the prospects of disposal of this land on the Reclamation " in spite of its " unusual attraction to investors ". We doubt the Reclamation will have unusual attraction to investors on account of the increased cost of the kind of foundations required for large houses on such sites. Investors burnt their fingers on the Ballard Estate. The reclamation will not include many sites for business purposes, and therefore the capital for business purposes will not be attracted in this direction. The scheme depends substantially upon capital for residential purposes. It is admitted that " the present high cost of building is likely to have a deterrent effect in the matter of disposal of the land on the Reclamation ". (*Vide* paragraph 20 of the Sub-Committee's Report). We are not told whether the reclamation will furnish sites for palaces for Princes or for flats for peasants. We cannot do better than quote Sir Henry Proctor's evidence before the Claude Hill Committee:—" I do not myself consider that the scheme quite fulfils the object aimed at, which is, I understand, to provide housing accommodation at reasonable rents. It is perhaps true that Rs. 25 per square yard is a reasonable rate for land in Bombay, situated as the proposed reclamation will be; but it appears to me that if it is to be the price of the land, then it will only furnish accommodation for wealthy people or result in the erection of flats.....which, in our opinion, are most unsuitable for this, and except in certain back plots should not be encouraged on the reclamation. The results foreshadowed in Messrs. Lowther Kidd and Company's report, *viz.*, 'a decided abatement of the excessive cost of housing and the substitution of a type of house better adapted to conditions of living in a tropical climate' are hardly likely to be obtained unless there are a good proportion of sites available at considerably below that figure ". These remarks must carry greater weight with the enhanced rate of Rs. 60 per square yard instead of Rs. 25 and the doubled or trebled cost of building. The Committee do not trouble to tell us what the cost of building flats will be and what rents these flats must fetch. Assuming that the average building plot is 1,200 square yards, each plot will cost Rs. 72,000 for land alone. We cannot accept the Sub-Committee's general estimate that the cost of a block of flats will be Rs. 50,000 per flat and the rentals Rs. 450 per mensem on the reclamation on account of the necessity of special foundations. The

experience on the Ballard Estate makes us fix the cost at Rs. 65,000 per flat on the most optimistic basis. The cost of a block of 6 flats will therefore be Rs. 4,62,000. The cost is practically prohibitive at the present time. The Sub-Committee themselves feel oppressed by this factor to some extent as they " suggest that steps should be taken to ascertain what, if any, reduction, could be effected if Government supplies stone to builders from the Kandivli quarry at cost price.....an investor is not likely to put money into a building unless there is a reasonable prospect of a demand for the accommodation, and as the demand will depend on the rent charged, the prospects of disposal of the area would be improved if means could be found to enable builders to erect houses at moderate cost". (*Vide* paragraph 20.) Evidently the Director has not been authorised to assure the Committee that Government would supply stones to builders at cost price from the Kandivli quarry. From keeping law and order to stone-supplying is an interesting though novel development in the business of Government. But it will not carry the case to success. The capital required annually for 20,000 square yards divided into 16·6 building sites at 1,200 square yards per block of 6 flats would be roughly 75·5 lakhs per annum. We are convinced that this anticipation is far too sanguine to be brought within the range of practical politics. Taking 9 per cent. to cover interest at 6 per cent. *plus* the usual outgoings the rent per flat would be over Rs. 575 per mensem. The Municipal assessment book will probably convince the most optimistic that no investor in houses and flats can expect nearly 100 new tenants at Rs. 575 per mensem or even the Sub-Committee's Rs. 450 per mensem, every year for 18 years as scheme II for blocks 1 and 2 anticipates. We apprehend that the mentality of the Directorate has not yet undergone the desired change. No doubt the prospects of fabulous profits have vanished into the region of fairy tales but the hopes of reducing the dead loss of 533 lakhs have possessed the authors, advisers and executors of this Wild Cat adventure.

18. We regret that the Majority Report does not sufficiently emphasize the gravity of the responsibility of Government in lightly embarking upon the scheme without proper examination of the efficiency of the dredging system. Dredging was the *crux* of the scheme. " The successful reclamation of the enclosed area by means of pumping material dredged from the sea bed is the *crux* of the whole scheme " (per Sir George Buchanan). " I believe I am correct in saying that dredging operations on this scale have never been attempted either in India or elsewhere ". The Government of India had plainly warned the Government of Bombay " that even in Bombay experience of that type of reclamation on an open sea was limited ". A municipality which undertook such a scheme without availing themselves of the lessons of experience would be suspended for incapacity and scandalous misconduct. But the Government of Bombay stands convicted of declining to learn from experience. They ordered the same kind of dredging plant as did service for the Port Trust without even ascertaining what experience taught in the Bombay harbour. Five minutes would have sufficed to learn enough to make any man pause and reflect further. The Port Trust dredgers never attained the designed efficiency. The dredging plant was ordered from England in spite of Mr. Kidd's opinion that such plant had reached greater perfection in the United States of America. The actual output during the working season of 1923-24 had been very *considerably less*. We assume this meant 25 per cent. efficiency in actual filling. And yet Sir George Buchanan deprecated framing an estimate on the basis of the results then obtained on the ground that it was largely of an experimental character. " We understand that the Engineers, Messrs. Meik and Buchanan, are confident that these figures can be substantially improved upon ". (*Vide* paragraph 6 of the Sub-Committee's report). Evidently the Directorate are still prepared to repose reliance on the optimists. The most extraordinary part of the whole affair is that no gaurantee for the designed efficiency was secured upon ordering the plant. The Port Trustees were vitally interested in the dredging operations of the Directorate in the harbour. The Royal Indian Marine were also interested. Their objections were so sound as to have prevailed without a whisper of complaint. They were never consulted. All this cannot be passed over as " a grave initial error " but can only be stigmatised as a " grave scandal ". We do not deem to proper for us to employ the language which would have been employed by share-holders if the promoters of the company had fooled the share-holders as the tax-payers have been fooled by the advisers and officials of Government. In England the Cabinet would have been dismissed by the Commons without much ado.

19. We cannot agree with the majority that the main responsibility must rest with Sir George Buchanan for the predicament in which Government now find themselves (*vide* paragraph 7 of the report). We are of opinion that the whole responsibility rests with Government. We suggest that Counsel be consulted as to the civil and criminal liability of Sir George Buchanan.

20. We have carefully considered Mr. Manu Subedar's Sub-Committee Minority Report, " the notes on some of the points in Mr. Subedar's Minority Report " and his rejoinder. We are much indebted to Mr. Subedar's industrious and elaborate report which has opened our eyes. We have refrained from incorporating the exposure of blunders of the expert and other advisers of Government in this report simply to prevent duplication. We recommend (1) the abolition of the Directorate, (2) the transfer of its activities to the Public Works Department, (3) a thorough examination of the prospects of completing block No. 8 for military purposes, (4) the immediate declaration of the abandonment of the rest of the scheme and (5) the re-examination of all the schemes that arose from and were affected, directly or indirectly, by the Back Bay Reclamation Scheme.

21st January 1926.

(Sd.) JOSEPH BAPTISTA.
(,,) FAZAL IBRAHIM RAHIMTOOLA.
(,,) MANU SUBEDAR (subject to minute of dissent).
(,,) Ig. D'MONTE.
(,,) S. K. BOLE.
(,,) D. D. RODRIGUES.

Minute of dissent by Mr. Manu Subedar.

I have signed the minority report because I find therein practical agreement with eight out of the following nine conclusions with which I concluded the minority report of the Sub-Committee :—

1. The scheme was never properly considered by the Government of Bombay.
2. The sanction of the Government of India was given in a hurry and was secured through an incomplete presentment of the entire programme.
3. The dredging plant was ordered even before the scheme was sanctioned and the specification of the plant must have been faulty to give results very much lower than what was expected. After complete stoppage, enquiries should be held into the financial liabilities of the manufacturers of the plant and the responsibility of the officers involved in its ordering and purchase.
4. Public opinion or business opinion of the City was not at all considered at any stage in the progress of the programme.
5. Grave financial miscalculations were made both as to cost and realisations.
6. The question of interest charges was never seriously thought of.
7. The period of disposal and the possibility of disposal or the possible price to be realised were not considered.
8. At a much earlier stage the scheme could have been stopped with a much smaller loss and about Rs. 2,50,00,000 of public funds spent on the scheme could have been saved in this manner.
9. The scheme should be immediately stopped, the establishment disbanded and the plant sold.

I regret I cannot concur with my colleagues in the recommendation that block 8 should be completed for the military because I think that any saving to the Government of Bombay at the expense of the Government of India is no saving at all but a mere book entry so far as taxpayer is concerned. But I must object to the further lock-up of public funds amounting to Rs. 691·39 lakhs in working up the dredger and in proceeding with the programme, which has in every respect been proved unworkable*. The further outlay of any funds in order to add a single

* See paragraph 91 of Sub-Committee Minority Report.

square yard of land to the City of Bombay is not justified in view of the one crore square yards of vacant land now available and the continuance of a department, which has already through inefficient and unsatisfactory working led to such great losses, would be a blot on the administration of Bombay Presidency. The uncertainty as to further direct loss out of the reclamation scheme on the head of the taxpayer is only counterbalanced by the uncertainty with regard to the final settlement of numerous problems, particularly of railway terminals which arose out of the discussion of the Back Bay Reclamation Scheme. I, therefore, suggest an immediate stoppage and the liquidation of the assets and a commission of enquiry to apportion the relative blame for the fiasco as well as to see whether any part of the losses could be recovered from the consulting engineers and other advisers of the Government or from the makers of the dredging plant.

APPENDIX A.

Copy of letter No. S.D.-1313, dated the 25th August 1924, from the Acting Secretary to Government, Development Department, to the Acting Director of Development.

" In the last session of the Legislative Council there were a number of resolutions regarding the operations of the Development Directorate which were not discussed for want of time. The principal of these resolutions stood in the name of Mr. Lalji Naranji and the first part of it was to the following effect :—

> ' That in view of the conclusions arrived at during the period of war boom that the land available in Bombay was inadequate having proved erroneous, this Council recommends to Government that a committee, with a non-official majority, be forthwith appointed to enquire into the activities of the Development Department as to how far and in what directions such activities should be continued or eliminated.'

" 2. I am directed to inform you that Government see no objections to the part of the resolution quoted above being considered and reported on by a committee. Mr. Lalji Naranji has suggested a committee with a non-official majority. The Advisory Committee appointed in connection with the Development Department is a very representative body and Government are of the opinion that this committee should be entrusted with the investigation of this very important question. I am directed to request that the matter should be placed before the committee and that they should be asked to report upon it. For this purpose the committee should be supplied with all the necessary facts and figures.

" 3. The whole position of the Development Department has had the very serious consideration of Government and Government have already reached conclusions and taken action in several matters. It would be most useful to know how far the Advisory Committee agree with Government in the views which they have already formed and whether the Committee would propose that Government should further curtail their activities."

APPENDIX B.

Names of the Members of the Advisory Committees for the City of Bombay and the Bombay Suburban Division.

For Bombay City.

1. § Dr. Nadirshaw H. E. Sukhia, L.M. & S., L.V.Sc., F.R.S.I. (Municipal Corporation).
2. || Fazal Ibrahim Rahimtoola, Esquire, B.A. (Municipal Corporation).
3. ‡ R. H. A. Delves, Esquire, F.S.I. (Chairman, City of Bombay Improvement Trust).
4. ‡ E. C. Reid, Esquire (Chamber of Commerce, Bombay).
5. ‡ Jehangir Bomanji Petit, Esquire (Millowners' Association, Bombay).
6. || Manu Subedar, Esquire (Indian Merchants' Chamber).
7. *‡ L. U. Mongini, Esquire (Bombay Presidency Trades' Association).
8. ‡ W. H. Neilson, O.B.E. (Bombay Port Trust).

Nominated by Government:

9. || Sitaram Keshav Bole, Esquire, M.L.C. (Working Classes in Bombay).
10. || Joseph Baptista, Esquire, L.C.E. (Bom.), B.A., L.L.B. (Cant.), Bar.-at-Law, M.L.C. (Working Classes in Bombay).

For Bombay Suburban.

11. || Ig. D'Monte, Esquire (Bandra Municipality).
12. || D. D. Rodrigues, Esquire (Kurla Municipality).
13. †‡ C. J. Hansoti, Esquire (Ghatkopar-Kirol Municipality).
14. ‡ Janmejay Chhabildas, Esquire, M.A. (Camb.) (Notified Area Committees).

Added as per Government Resolution No. S.D.—9, dated the 15th January 1925.

15. § A. N. Surve, Esquire, B.A., LL.B., M.L.C.

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* The Bombay Presidency Trades' Association nominated Mr. L. U. Mongini *vice* Mr. F. G. Scowen proceeded on leave.

† The Ghatkopar-Kirol Municipality elected Mr. C. J. Hansoti *vice* Mr. P. J. Vakil (deceased).

‡ Signed the Majority Report.

§ Did not sign any Report.

|| Signed the Minority Report.

APPENDIX C.

REPORT OF THE SUB-COMMITTEE APPOINTED TO REPORT ON THE FINANCIAL PROSPECTS OF THE BACK BAY RECLAMATION SCHEME.

In submitting their report the Sub-Committee do not consider it necessary to deal with the projects put forward on several occasions in former times. In May 1919, the Government of Bombay requested Sir George Buchanan, K.C.I.E., to report on the scheme for reclaiming 1,145 acres in Back Bay, the specific points on which his opinion was required being as follows :—

(1) The practicability of the scheme from the engineering point of view.

(2) The suitability of the type of wall proposed, or alternate suggestions for better types.

(3) The suitability of the proposed method of reclamation by means of dredging, or alternative proposals for the same.

2. Sir George Buchanan submitted his report in September 1919. He expressed the opinion that there could be no doubt as to the practicability of the scheme, and recommended that the filling should be carried out by dredging by means of a plant designed to deal with 25 million cubic yards in 5 years, working 170 days a year and 15 hours actual pumping a day, in two shifts. On this basis, he submitted an estimate of the cost of the whole work amounting to Rs. 367·61 lakhs. It may be noted that 25 million cubic yards represents the estimated cubic content of the reclamation, and no allowance was made for shrinkage in drying out, which at 20 per cent. would bring the actual amount of filling required up to 30 million cubic yards, requiring 6 years' work at Sir George Buchanan's estimated output of the plant. Moreover, Sir George Buchanan's estimate was further vitiated by his failure to allow for losses as between the amount of material excavated in the harbour and the actual filling deposited in the reclamation, losses which have, in practice, been found to be very considerable.

3. The Government of Bombay accepted Sir George Buchanan's recommendations and, with the sanction of the Government of India and the Secretary of State, decided to proceed with the project. Messrs. Meik and Buchanan were appointed to act as the Engineers to the Secretary of State in carrying out the scheme, and arrangements were made in May 1920 for the purchase of the necessary dredging plant through the Director General of Stores, and Government were then finally committed to the project.

4. In November 1920, the Development Department was formed, with an executive organisation, known as the Development Directorate, to carry out the work, with other schemes of development. As soon as the Directorate got to work the preparation of a detailed project estimate was put in hand which, on completion, placed the total cost of the scheme at Rs. 702·43 lakhs. The excess was due to the fact that, since Sir George Buchanan prepared his estimate, the prices of machinery, materials, fuel and labour had risen considerably. Also Sir George Buchanan's estimate had been based on exchange at Rs. 12 to £1, whereas when the plant was imported in 1921, the rate was in the neighbourhood of Rs. 15 = £1. Moreover, insufficient provision had been made for the cost of the subsequent development of the reclaimed area in the way of roads, drains, lighting, etc. Forecasts prepared on the basis of the detailed project estimate figure of Rs. 702·43 lakhs showed that it would be necessary to obtain an average rate of Rs. 55 per square yard for the 22 lakhs square yards net to be sold to the public, assuming disposal spread over 11 years, in order to recoup the expenditure with interest, and leave a small margin of profit.

5. The next development was that, as the Bombay Port Trust and the Royal Indian Marine were unable to agree to the harbour being dredged over the whole area proposed by Sir George Buchanan, it became necessary to supplement the dredging in the harbour by dredging in Back Bay, for which additional plant

costing Rs. 28 lakhs was necessary. Against this a saving of some Rs. 18 lakhs had been effected in other items, leaving a net excess of about Rs. 10 lakhs, the Chief Engineer's revised estimate of cost being Rs. 712·79 lakhs. The cost of dredging was still maintained at 5 annas per cubic yard, the figure based on Sir George Buchanan's estimate of the output of the dredging plant. During the working season 1923-24 the actual output had been very considerably less, but, as the work during the first year had been largely of an experimental character, Sir George Buchanan deprecated framing an estimate on the basis of the results then obtained, and urged that the complete results of the season 1924-25 should be awaited. Those results are now available and we give the figures of the two seasons working below :—

Season.	Number of pumping hours worked.	Quantity of material dredged as ascertained from soundings in the harbour.		Actual filling as measured in Back Bay.	
		Per season. Cubic yards.	Per pumping hour. Cubic yards.	Per season. Cubic yards.	Per pumping hour. Cubic yards.
1923-24 ..	843	8,59,858	1,020	5,28,000	627
1924-25 ..	1,473	12,61,986	856	6,80,438	462

6. We understand that the Engineers, Messrs. Meik and Buchanan, are confident that these figures can be substantially improved upon, but we consider it only prudent to base our calculations on the results actually obtained, which place the cost per cubic yard of filling deposited at Rs. 1-3-0, against 5 annas, the former estimate. In effect the filling will take 4 times as long, and cost about 4 times as much, as it would have done if Sir George Buchanan's estimate of output had been attained. On this basis the Chief Engineer now estimates the cost of the whole scheme at Rs. 11 crores and the date of completion 1944-45.

7. Before proceeding to examine the financial prospects of the scheme in the light of the data now available, we have thought it advisable to obtain figures to show the area and value of land which has been placed on the market in Bombay during the last 25 years, and the area which is, or will, during the next few years, be available for disposal. In reply to our enquiries the Bombay Municipality have informed us that the area of land disposed of by that body during the last 25 years is inconsiderable, but from the Improvement Trust and the Port Trust we have received figures which give the following results :—

Land disposed of during the last 25 years.	Area Square yards.	Value. Rs.
Improvement Trust	32,42,700	6,70,11,800
Port Trust	3,52,600	98,97,000
Total ..	35,95,300	7,69,08,800

8. It will be seen that nearly 36 lakhs of square yards have been disposed of by these two bodies during the last 25 years, at an average price of between Rs. 21 and 22 per square yard. By far the larger area was disposed of by the Improvement Trust, whose detailed figures show that in the best year 1921-22, 4·38 lakhs square yards were placed on the market of an aggregate value of Rs. 73·19 lakhs. In 1918-19, 2·74 lakhs square yards were disposed of at a total value of Rs. 48·90 lakhs. In 1916-17, the area was 2·12 lakhs square yards and the value Rs. 47·24 lakhs. In 1920-21, the area was 1·40 lakhs square yards at a total value of Rs. 46·17 lakhs, whilst in four other years the value of land disposed of was in the neighbourhood of Rs. 40 lakhs each year.

9. Coming to land still available for disposal, or likely to be available in future, the figures are as follows :—

Land still available for disposal or likely to be available in future.	Area (square yards).	Approximate value (lakhs of Rs.)
Improvement Trust	6,434,900	1,206·01
Municipality	994,766	532·00
Port Trust	885,854	437·13
B. B. & C. I. Railway land at Colaba	105,577	42·23
G. I. P. Railway land at Colaba	34,525	13·81
Military land in Fort and Colaba	171,427	267·13
Colaba Land and Mill Company, Colaba	55,822	22·33
Total ..	8,682,871	2,520·64

The great bulk of this land, in the hands of the Improvement Trust and the Municipality, lies north of Dadar and will not, we think, compete directly with the Back Bay Reclamation. The bulk of the Port Trust land is in the neighbourhood of Sewri ; but the lands set free in Colaba by the removal of the Cotton Green to Sewri, belonging to the Port Trust, the Colaba Land and Mill Company and the Railways, as well as the land belonging to the Military Department at Colaba, must compete to some extent ; whilst the military land on Queen's Road, about 1 lakh square yards, will do so directly. But although much of the land included in the table may be said to be in a different category from that on the Reclamation, and admitting that sites on the latter may be expected to offer an unusual attraction to investors, it cannot be denied that this very large area must in some degree affect the prospects of disposal of the land on the Reclamation.

10. As regards the price that Government might reasonably expect to obtain for the reclaimed land, we consider that an average rate of Rs. 50 per square yard would not be an unduly optimistic figure, the actual prices varying from Rs. 80 per square yard in blocks 1 and 2 near Church Gate Station to Rs. 20, or a little over, in block 7, next the military area (see diagram attached). We find it far more difficult to estimate the period of disposal. We think that if Rs. 50 lakhs are assumed as gross annual sale-proceeds, and 22 years as the minimum period for disposal, we shall probably be suggesting the outside limit in the direction of optimism, and that it will be desirable to consider also the effect of less favourable conditions.

11. On the basis of the figures referred to at the end of paragraph 6 above, the Chief Engineer has worked out a forecast which shows that, in order to recoup expenditure and interest, it will be necessary to dispose of the whole 22 lakhs square yards in 15 years at an average rate of over Rs. 80 per square yard, a result which, as indicated above, we believe to be very doubtful of realisation. The Chief Engineer has also prepared forecasts to show the effect of speeding up the work by supplementing the dredging by dry filling. Even at the present high working cost of dredged filling, Rs. 1-3-0 per cubic yard, equivalent to Rs. 4-6-0 per 100 cubic feet, it is less than the estimated cost of earth filling, Rs. 5-10-0 per 100 cubic feet, and the figures show that whilst earth filling is of advantage, where, as in the case of the military land, there is a purchaser ready as soon as the area is reclaimed, there is no benefit to be gained by employing the more expensive method of filling in the case of blocks 3 to 7 where the period of disposal of the land must, in any case, extend some years beyond the date of completion. As will be seen later, we recommend dry filling in the case of blocks Nos. 1 and 2.

12. Having satisfied ourselves that a loss on the scheme is almost inevitable, we have directed our enquiries to an examination of three possible alternatives :—

(1) To stop the work at once ;

(2) To stop it at some intermediate stage ; or

(3) To carry it to completion.

As regards the first of these we have discussed with the Chief Engineer the value which would reasonably be placed on the assets in the form of plant and machinery

which would be available for disposal, if the work were closed down now. The Chief Engineer estimates the depreciated value, based on to-day's new cost, as follows :—

	Rs.
Dredging plant	61,74,000
Other plant and machinery	36,17,000

In the case of the dredging plant he informs us that, unless a similar work of about the same magnitude were about to be started in some other part of the world, it is unlikely that more than the break up value of say Rs. 10 lakhs would be obtained. In the case of the other plant and machinery, including rolling stock, it would be reasonable to assume a figure fairly close to his estimate. We therefore take the estimated liquidation value of the plant to-day as under :—

	Rs. (lakhs).
Dredging plant	10
Other plant	35
Total ..	45

On this basis we arrive at the net liability as on 1st October 1925 as follows :—

	Rs. (lakhs).
Debt on 31st March 1925	493·00
Expenditure 1st April to 31st September	25·50
Rs. 493·00 lakhs *plus* interest at 3 per cent	507·79
Rs. 25·50 lakhs *plus* interest at 1½ per cent.	25·88
Debt on 1st October 1925	533·67
Less estimated liquidation value of plant	45·00
Net liability on 1st October 1925	488·67

Note.—The term " present value " wherever used in this report is the value on 1st October 1925.

13. This sum of Rs. 488·67 lakhs represents the approximate debt which would remain to be wiped off now, if the work were closed down at once. In comparing the possibilities of alternatives (2) and (3) with this result, we have adopted the procedure of showing the estimated annual expenditure year by year, after the 1st October 1925, to complete the work up to the required stage ; and of entering, in the same way, the receipts as they are expected to accrue. The annual expenditure and receipts of each year are then written back on the 6 per cent. compound interest tables to 1st October 1925, when the present value of the estimated future expenditure, compared with the present value of the estimated future receipts, affords a simple method of judging the advantage or otherwise of proceeding with the work.

14. The most favourable intermediate stage to stop the work is, we think, on the completion of blocks 1, 2 and 8, the reasons being that—

(1) these blocks require less average depth of filling and are therefore cheaper to reclaim per square yard than the rest of the area ;
(2) the Government of India have agreed to pay Rs. 20 per square yard for block 8, the military area, on its completion ;
(3) blocks 1 and 2 to the north and south of the Church Gate Street extension contain some 3,60,000 square yards net building area, without encroaching on the large recreation ground proposed in block 1, and this land will undoubtedly be the most valuable on the reclamation.

The Chief Engineer has prepared a programme and estimate of works for the completion of these three blocks only, on the assumption that further work on the sea-wall will be stopped, as well as on storm water drains other than those that must be completed in connection with this restricted programme. The available

rolling stock is to be employed in running two trains a day of earth filling to supplement the dredged filling in block 8 until it is comp eted, when the earth filling will be diverted to supplement the dredged filling in blocks 1 and 2. With the data supplied us by the Chief Engineer we have prepared the accompanying statements I and II, which exh bit the financial effect, in terms of present value, of completing blocks 1, 2 and 8, and of disposing of the 3,60,000 square yards in blocks 1 and 2, in the case of I at 60,000 square yards per annum at Rs. 80 per square yard, and in the case of II at 20,000 square yards per annum at Rs. 60 per square yard.

15. Some explanation of those statements is perhaps desirable. On the expenditure side we show first the annual estimated cost of reclamation from 1st October 1925 up to completion, then the cost of road making, etc., in the actual building area, year by year, in proportion to the rate of disposal, road making being assumed on the average to commence two years before disposal. In addition, Rs. 5 lakhs have been added, distributed over the first two years of development, to allow of the construction of the portion of the marine drive between the recreation ground in block 1 and the sea. The marine drive from this point to Chowpatty is estimated to cost Rs. 5·30 lakhs, but has never been included in the estimates of the Reclamation. It is reasonable to suppose that the Municipality would contribute to the cost of this portion of the drive in return for the large recreation ground provided in block 1. The provision for road maintenance is based on the assumption that the roads made in one year will have to be maintained for four years before the Municipality takes them over. Provision is made for a small estate establishment at Rs. 3,000 per mensem, and brokerage at ½ per cent. on annual sale proceeds is added. On the receipt side, the proceeds from the sale of the Military area are entered in 1929-30, the year in which block 8 will be completed. The area to be handed over to the Military Department was originally 265 acres, but part of this was on the East Colaba Reclamation which has been closed down. An area of 247 acres remains for transfer on the west of the peninsula and this, at Rs. 20 per square yard, amounts to Rs. 239·09 lakhs, the figure entered. Credit for the estimated liquidation value of the dredging plant is taken in 1929-30, the year after which dredging in the harbour ceases, and of the rest of the plant, at a further reduced value of Rs. 25 lakhs, in 1931-32, the year after the completion of blocks 1 and 2. The sales of land in blocks 1 and 2 are taken at the rates and period of disposal already referred to in each case. Block 2, according to the provisional layout plan, is reserved for Government buildings, but we assume that this reservation would be withdrawn, and the area released for sale to the public on a fresh layout. Unless this is done, the figures we have given would of course be valueless.

16. A note of the results arrived at in statements I and II appears on each statement, but for convenience we summarise them below.

Statement.	Particulars.	Gain as on 1st October 1925. Rs. lakhs.	Debt as on 1st October 1925. Rs. lakhs
I ..	Disposal of blocks 1 and 2 at average rate of Rs. 80 per square yard in 6 years at 60,000 square yards per annum	251·89	281·78
II ..	Disposal of blocks 1 and 2 at average rate of Rs. 60 per square yard in 18 years at 20,000 square yards per annum	164·53	369·14

The gain shown is the present value of the estimated receipts, less the present value of the estimated expenditure after 1st October 1925, in each case; and the debt on 1st October 1925 is the present debt of Rs. 533·67 lakhs less the gain at present value. If statement I is an unduly optimistic forecast of the progress of disposing of the 3,60,000 square yards net building area in blocks 1 and 2, statement II goes, we think, to the other extreme; and it appears to us to be fairly safe to assume that if blocks 1, 2 and 8 are carried to completion, it will be possible to reduce the present debt of Rs. 533·67 lakhs to something under Rs. 350 lakhs at present value. It is possible that better results may be obtained with the dredging plant in the future, or that changes may occur justifying a more optimistic forecast of disposal. We consider therefore that it would be preferable to proceed with

the work for the present on the assumption that blocks 1, 2 and 8 are to be completed, rather than to close it down in its present condition.

17. We have now to consider the financial prospects if the scheme is carried to completion, and from estimates of the annual expenditure necessary to complete the whole scheme after 1st October 1925, with which the Chief Engineer has provided us, we have prepared two forecasts, statements III and IV. The first of these assumes the employment of earth filling up to the completion of the Military area only. The second provides for two trains of earth filling throughout. In neither case is any credit taken for value of plant on completion as the life of the plant will be practically exhausted. It will be seen that it is estimated that under statement IV the scheme will be completed two years earlier, but on the financial side there is a slight advantage in favour of Scheme III, the present value of the cost of completion after 1st October 1925 being as follows :—

	Rs. lakhs
Scheme III	352·29
Scheme IV	353·65

The present value of the receipts are of course the same in each case. In both these statements, 22 years is assumed for the disposal of the 22 lakhs square yards net building area on the Reclamation (omitting the Military area), at an average rate of Rs. 50 per square yard, or gross receipts of Rs. 50 lakhs per annum. The costs of road construction, maintenance and disposal are not shown separately as in statements I and II, but are taken in reduction of gross receipts, the net receipts thus arrived at being placed at Rs. 39·25 lakhs per annum for 22 years.

18. The financial result, if the assumed conditions as regards disposal could be realised, would be to reduce the debt at present value to Rs. 336 lakhs in the case of scheme III and Rs. 337·36 lakhs in the case of scheme IV. But as this may be considered to be an optimistic estimate we have prepared statement V for comparison, which shows the result in terms of debt at present value, if the average rate per square yard remained at Rs. 50, but the period of disposal were extended to 25, 35, 45 or 55 years. It will be seen that even if the period of disposal is extended to 35 years, the resulting debt at present value, Rs. 454·80 lakhs, is still substantially less than the amount that would be lost, Rs. 488·67 lakhs, if the work were closed down now. At the same time we feel that the problem of forecasting the prospects of disposal of 22 lakhs square yards, stretching from Church Gate to Colaba, offers much greater difficulties than that of dealing with only 3·60 lakhs square yards in blocks 1 and 2 in the neighbourhood of Church Gate Station. We are not prepared, therefore, to make any definite recommendation in regard to completion of the scheme beyond blocks 1, 2 and 8 at this stage. We think that the matter should be further considered and decided in 1927-28, when the dredging in the Military area is approaching completion, and when the plant working in the harbour will have to stop work if the completion of the remainder of the scheme is then dropped. In the meantime further experience of the working of the dredging plant will have been gained, and the figures we have given can be revised each year as soon as the results for the season are available. If these recommendations are accepted, some reduction in the Establishment Charges of the Back Bay Reclamation Scheme should be possible, as well as in the overhead expenses.

19. Before closing our report we desire to refer to a few other points a consideration of which might, we think, assist towards a solution of the problem when the time comes for a decision to be made. The Chief Engineer has informed us that since the construction of the sea wall there are signs of natural silting within the reclaimed area, and that a survey, made in November 1924, showed that about half a million cubic yards of material had been deposited in this way. A further survey is to be made next November and, as a result of the extension of the sea wall, may show additional accretion. No allowance for such silting has been made in our calculations, but, as this might be an important factor, we suggest that steps should, if possible, be taken to encourage this natural action.

20. The present high cost of building is likely to have a deterrent effect in the matter of disposal of the land on the Reclamation. We therefore suggest that

steps should be taken to ascertain what, if any, reduction could be effected if Government supplied stone to builders from the Kandivli Quarry at cost price. Assuming that the cost of a block of flats to-day is not less than Rs. 50,000 a flat, then taking 9 per cent. to cover interest at 6 per cent., *plus* the usual outgoings, the rent would be Rs. 375 a month, even if the land cost nothing. Taking 1,200 square yards of land at Rs. 50 per square yard for a block of 6 flats, the rent of each flat works out to Rs. 450 per month. If the average building plot is taken at 1,200 square yards there will be some 1,800 such plots on the whole Reclamation. An investor is not likely to put money into a building unless there is a reasonable prospect of a demand for the accommodation, and as the demand will depend on the rent charged, the prospects of disposal of the area would be improved if means could be found to enable builders to erect houses at moderate cost.

21. If the reclamation were completed and built over, the municipal property tax at 11 per cent. on the rateable value would amount to a very large annual sum. We are not aware whether the reclaimed area will necessarily be included within municipal limits on its completion, but we suggest that the legal aspect of the case should be examined. If it is optional on Government to allow the area to be included, there would appear to be possibilities for negotiation with the Municipality in the future for an annual contribution out of the general tax on account of the great additional amenities which the reclamation will provide. So far, it has been assumed that the 187 acres of additional open spaces, and 4 miles of Marine drive, will be paid for entirely by the purchasers of the land on the reclamation. It does not seem unreasonable that the people of Bombay, in the next generation, should contribute something towards the cost of the great additional facilities which the public in general will secure.

22. In conclusion, our recommendations are that work on the sea wall should be stopped for the present, and all efforts concentrated on the completion of blocks 1, 2 and 8, employing 2 trains of dry filling per day to supplement the dredging, first in block 8 until completion, and then in blocks 1 and 2. That the question of continuing and completing the whole reclamation should be reconsidered in 1927-28, when the dredging in block 8 will be approaching completion, and when further experience of the working of the plant will have been gained.

23. In any case, unless there is a marked improvement in the output of the dredgers and the conditions of disposal are found to be more favourable than we have thought it prudent to assume, we foresee a loss on the scheme. If this view is accepted, it would appear desirable to make early arrangements, if possible, to liquidate the anticipated loss at its present value, rather than to risk the accumulation, at compound interest, of a far heavier load of debt at some future date.

24. We desire to record our acknowledgments of the assistance rendered to us by the Chief Engineer, Mr. H. A. Elgee, in providing us with the figures on which we have based our conclusions, and by Mr. S. P. Gheewala, M.A., Senior Superintendent, Secretariat, who has acted as our Secretary.

H. A. L. HEPPER,
(*Chairman*),

R. H. A. DELVES,
(*Member*),

S. P. GHEEWALA,
(Secretary).

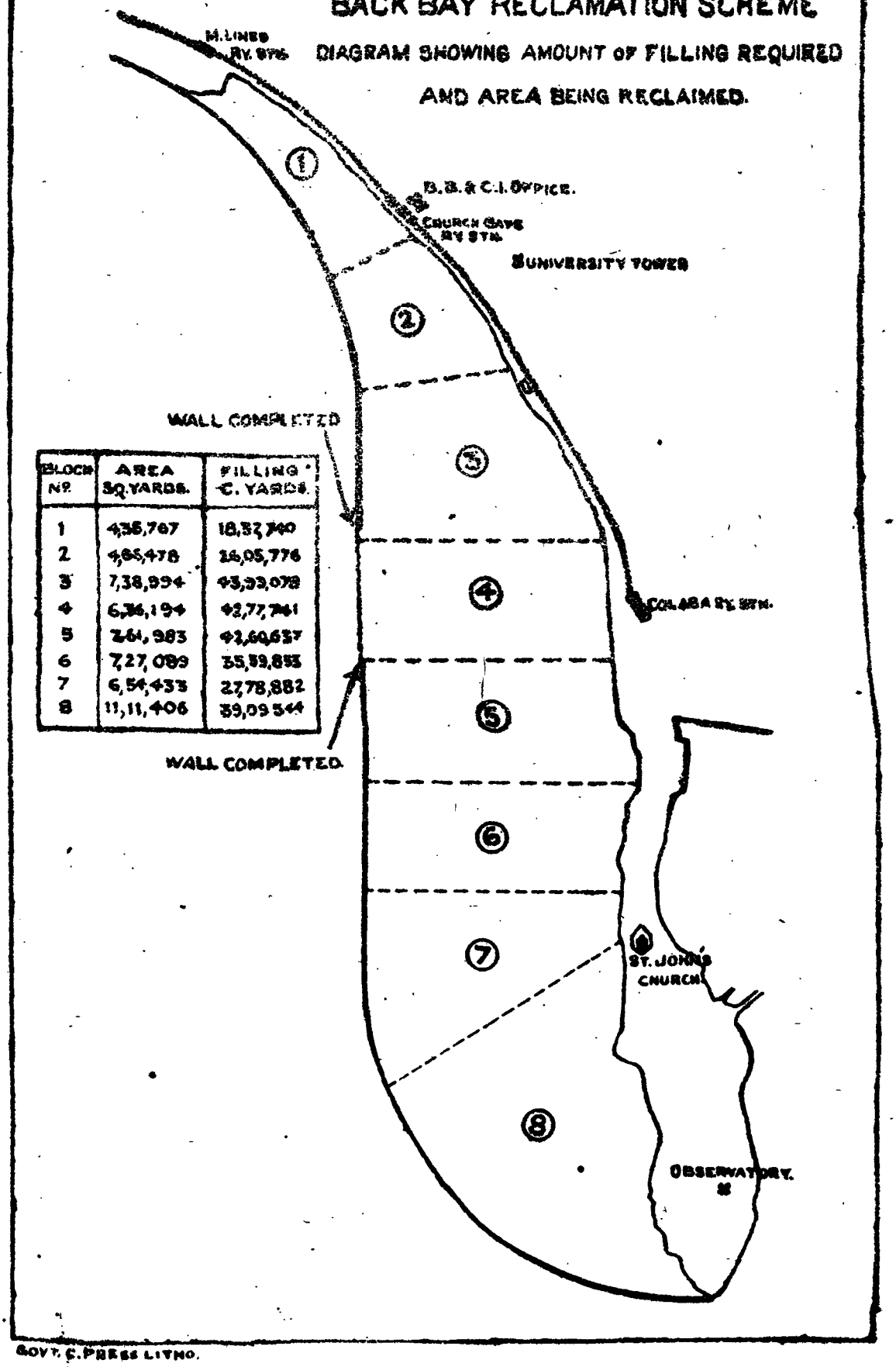
A. V. V. AIYAR,
(*Co-opted Member*).

18th November 1925.

Note.—Mr. Subedar has not signed the report of the majority. His separate report is attached. The error referred to by Mr. Subedar, which appeared in the first print of our report, has been corrected. Our conclusions and recommendations are not affected by this alteration.

BACK BAY RECLAMATION SCHEME

DIAGRAM SHOWING AMOUNT OF FILLING REQUIRED AND AREA BEING RECLAIMED.



BLOCK No.	AREA SQ. YARDS.	FILLING C. YARDS.
1	4,36,767	18,32,740
2	4,85,478	16,05,776
3	7,38,994	43,93,078
4	6,36,194	42,77,761
5	2,61,983	42,60,637
6	7,27,089	35,59,853
7	6,54,433	27,78,882
8	11,11,406	39,09,544

GOVT. C. PRESS LITHO.

STATEMENT I. –

Financial forecast for the completion of blocks 1, 2 and 8 only after 1st October 1925. Dredging in Military area to be supplemented by two trains a day dry filling until completion. Thereafter dry filling to supplement dredging in blocks 1 and 2.

Sales of 3,60,000 square yards in blocks 1 and 2 assumed at 60,000 square yards per annum at Rs. 80 per square yard, for 6 years. Gross receipts per annum = Rs. 48 lakhs.

Debt on 1st October ..Rs. 533·67 lakhs.

(All figures in lakhs of rupees.)

Period.	Expenditure.								Receipts.				
	Reclamation works.	Constructions of roads.		Maintenance of roads.	Cost of disposal.		Total.	Value as on 1st Oct. 1925.	For military area.	For land sold to public.	Estimated liquidation value of plant.	Total.	Value as on 1st Oct. 1925.
		In building area.	Additional for marine drive opposite recreation ground.		Estate office.	Brokerage at ½ per cent.							
1st October 1925 to 31st March 1926..	22·28	..	....	..	..	..	22·28	21·95	..	..	..	..	..
1926-27 ..	32·73	..	....	..	..	..	32·73	30·88	..	..	..	..	..
1927-28 ..	28·76	..	....	..	..	..	28·76	25·60	..	..	..	..	..
1928-29 ..	22·23	5·16	2·50	..	..	..	29·89	25·10	..	..	..	..	..
1929-30 ..	23·74	5·16	2·50	·07	·36	·24	32·07	25·40	239·09	48·00	10·00	297·09	235·32
1930-31 ..	20·44	5·16	....	·15	·36	·24	26·35	19·69	..	48·00	..	48·00	35·86
1931-32 ..	..	5·16	....	·22	·36	·24	5·98	4·22	..	48·00	25·00	73·00	51·46
1932-33 ..	..	5·16	....	·30	·36	·24	6·06	4·03	..	48·00	..	48·00	31·92
1933-34 ..	..	5·16	....	·30	·36	·24	6·06	3·80	..	48·00	..	48·00	30·12
1934-35 ..	..	..	....	·30	·36	·24	·90	·53	..	48·00	..	48·00	28·41
							191·08	161·20					413·09

Gain at present value = Rs. 251·89 lakhs, reducing debt at present value to Rs. 281·78 lakhs.

STATEMENT II.

Financial forecast for the completion of blocks 1, 2 and 8 only after 1st October 1925. Dredging in military area to be supplemented by two trains a day dry filling until completion. Thereafter dry filling to supplement dredging in blocks 1 and 2.

Sales of 3,60,000 square yards in blocks 1 and 2 assumed at 20,000 square yards per annum at Rs. 60 per square yard, for 18 years. Gross receipts Rs. 12 lakhs per annum.

Debt on 1st October 1925 .. Rs. 533·67 lakhs.

(All figures in lakhs of rupees)

Period.	Expenditure.								Receipts.				
	Reclamation works.	Roads construction and general development.		Maintenance of roads.	Cost of disposal.		Total.	Value on 1st Oct. 1925.	For military area.	Blocks 1 and 2.	Estimated liquidation value of plant.	Total.	Value on 1st Oct. 1925.
		In building area.	Additional for marine drive opposite recreation ground.		Estate office.	Brokerage at ½ per cent.							
1st Oct. 1925 to 31st March 1926.	22·28	..	....	..	..	..	22·28	21·95	..	..	..	..	..
1926-27 ..	32·73	..	....	..	..	..	32·73	30·88	..	..	..	..	..
1927-28 ..	28·76	..	....	..	..	..	28·76	25·60	..	..	..	..	..
1928-29 ..	22·23	1·72	2·50	..	..	..	26·45	22·20	..	..	..	..	..
1929-30 ..	23·74	1·72	2·50	·02	·36	·06	28·40	22·50	239·09	12·00	10·00	261·09	206·80
1930-31 ..	20·44	1·72	....	·05	·36	·06	22·63	16·91	..	12·00	..	12·00	8·97
1931-32 ..	..	1·72	....	·07	·36	·06	2·21	1·56	..	12·00	25·00	37·00	26·08
1932-33 ..	..	1·72	....	·10	·36	·06	2·24	1·49	..	12·00	..	12·00	
1933-34 ..	..	1·72	....	·10	·36	·06	2·24	1·41	..	12·00	..	12·00	
1934-35 ..	..	1·72	....	·10	·36	·06	2·24	1·33	..	12·00	..	12·00	
1935-36 ..	..	1·72	....	·10	·36	·06	2·24	1·25	..	12·00	..	12·00	
1936-37 ..	..	1·72	....	·10	·36	·06	2·24	1·18	..	12·00	..	12·00	
1937-38 ..	..	1·72	....	·10	·36	·06	2·24	1·11	..	12·00	..	12·00	
1938-39 ..	..	1·72	....	·10	·36	·06	2.24	1·05	..	12·00	..	12·00	
1939-40 ..	..	1·72	....	·10	·36	·06	2·24	·99	..	12·00	..	12·00	79·61*
1940-41 ..	..	1·72	....	·10	·36	·06	2·24	·93	..	12·00	..	12·00	
1941-42 ..	..	1·72	....	·10	·36	·06	2·24	·88	..	12·00	..	12·00	
1942-43 ..	..	1·72	....	·10	·36	·06	2·24	·83	..	12·00	..	12·00	
1943-44 ..	..	1·72	....	·10	·36	·06	2·24	·78	..	12·00	..	12·00	
1944-45 ..	..	1·72	....	·10	·36	·06	2·24	·74	..	12·00	..	12·00	
1945-46 ..	..	1·72	....	·10	·36	·06	2·24	·70	..	12·00	..	12·00	
1946-47 ..	..	1·72	....	·10	·36	·06	2·24	·66	..	12·00	..	12·00	
								156·93				490·09	321·46

*Annual net receipts of Rs. 12 lakhs per annum from 1932-33 to 1946-47 (15 years) equivalent to Rs. 180 lakhs received in 1939-40, which written back 14 years to 1st October 1925 = 79·61 lakhs.

Gain at present value = Rs. 164·53 lakhs, reducing debt at present value to Rs. 369·14 lakhs.

STATEMENT III.

Forecast for the completion of the whole scheme after 1st October 1925. Two trains a day earth filling upto completion of blocks 1 and 2 thereafter dredging and topping only.

Debt on 1st October 1925 .. Rs. 533·67 lakhs.

(All figures in lakhs of rupees.)

Period.	Expenditure.		Net Receipts.		Remarks.
	During period.	Value on 1st Oct. 1925.	Amount.	Value on 1st Oct. 1925.	
1st October 1925 to 31st March 1926	22·28	21·95			
1926-27	32·73	30·88			
1927-28	35·24	31·36			
1928-29	35·34	29·67			
1929-30	32·83	26·00			
1930-31	33·38	24·94	239·09	178·66	Receipts for military area.
1931-32	40·83	28·78			
1932-33	26·56	17·67			
1933-34	29·48	18·50			
1934-35	26·06	15·42			
1935-36	34·01	18·99			
1936-37	29·93	15·77			
1937-38	26·85	13·34			
1938-39	43·57	20·42			
1939-40	25·55	11·30	863·50	371·30	Annual average net receipts of 39·25 lakhs per annum for 22 years from 1929-30 equivalent to Rs. 863·50 lakhs written back 14½ years. Sales completed in 1951-52.
1940-41	25·55	10·66			
1941-42	25·55	10·06			
1942-43	8·22	3·05			
1943-44	10·09	3·53			
		352·29	1,102·59	549·96	

Gain at present value = Rs. 197·67 lakhs, reducing debt at present value to Rs. 336·00 lakhs.

STATEMENT IV.

Forecast for the completion of whole scheme after 1st October 1925 by dredging, plus *two trains of earth filling per day throughout.*

Debt on 1st October 1925 .. Rs. 533·67 lakhs.

(All figures in lakhs of rupees.)

Period.	Expenditure.		Net Receipts.		Remarks.
	During period.	Value on 1st Oct. 1925.	Amount.	Value on 1st Oct. 1925.	
1st October 1925 to 31st March 1926.	22·28	21·95			
1926-27	32·73	30·88			
1927-28	35·24	31·36			
1928-29	35·34	29·67			
1929-30	32·83	26·00			
1930-31	33·38	24·94	239·09	178·66	Receipts by sale of Block 8.
1931-32	47·50	33·49			
1932-33	32·73	21·77			
1933-34	40·70	25·54			
1934-35	33·23	19·67			
1935-36	33·52	18·72			
1936-37	32·73	17·24			
1937-38	32·73	16·27			
1938-39	32·87	15·41			
1939 40	32·23	14·26	863·50	371·30	Annual average net receipts of Rs. 39·25 lakhs per annum for 22 years from 1929-30, equivalent to Rs. 863·50 lakhs written back 14½ years. Sales completed in 1951-52.
1940-41	7·13	2·98			
1941-42	8·88	3·50			
		353·65	1,102·59	549·96	

Therefore gain at present value = 196·31 lakhs, reducing debt at present value to Rs. 337·36 lakhs.

STATEMENT V.

Debt on 1st October 1925 .. Rs. 533·67 lakhs.

Forecast for the completion of the whole scheme. Expenditure after 1st October 1925, and receipts by sale of military area, as in Statement III. Remaining land sold at an average price of Rs. 50 per square yard in 25, 35, 45 or 55 years, commencing in 1929-30.

Time for disposal.	Average net area to be sold each year.	Receipts by sale of land excluding military area.						Receipts by sale of military area as on 1st October 1925.	Total receipt as on 1st October 1925.	Cost of completing reclamation after 1st October 1925, as in Statement III on 1st October 1925.	Gain or loss as on 1st October 1925.		Debt as on 1st October 1925.	Receipts by sale of land (other than military area) as on 1st October 1925 required to recoup the whole expenditure (Col. 8 *plus* Col. 14).	Average rate per square yard which it would be necessary to obtain (excluding the military area) to recoup the whole expenditure (in round figures).
		Gross per annum.	Development and disposal expenses per annum.	Net receipts per annum.	Total net receipts.	Number of years written back to 1st October 1925.	Value of net receipts as on 1st October 1925.				Gain.	Loss.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Years.	Square yards.	Rs.	Rs.	Rs.	Rs.	Years.	Rs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs. lakhs.	Rs.
25	88,000	44,00,000	9,51,080	34,48,920	8,62,23,000	16	3,39,41,386	178·66	518·07	352·29	165·78	..	367·89	707·30	93
35	62,857	31,42,850	6,90,331	24,52,519	8,58,38,165	21	2,52,49,786	178·66	431·16	352·29	78·87	..	454·80	707·30	121
45	48,888	24,44,400	5,44,923	18,99,477	8,54,76,465	26	1,87,88,596	178·66	366·55	352·29	14·26	..	519·41	707·30	158
55	40,000	20,00,000	4,53,200	15,46,800	8,50,74,000	31	1,39,73,817	178·66	318·40	352·29	..	33·89	567·56	707·30	208

N.B.—If Rs. 3 crores were written off now, the figures corresponding to those in the last column would be Rs. 59, 75, 96 and 125 per square yard for disposal in 25, 35, 45 and 55 years, respectively.

DISSENTING REPORT OF MR. MANU SUBEDAR ON THE BACK BAY RECLAMATION SCHEME.

I regret the necessity of writing a separate report, but as the difference of opinion with my colleagues is serious, I think it fair to present the conclusions which I have reached in a separate report for the Special Committee, in the first instance, and then, for the public of Bombay.

2. As the only non-official member of this Sub-Committee I had considerable difficulty with the Department in securing the necessary papers relating to the programme as it was passed by the Government of Bombay and sanctioned by the Government of India. I append a letter, which I was compelled to write to the Chairman of the Committee before some of the things that I wanted were made available.

3. During the discussion of the report some question arose as to the exact terms of reference to the Financial Sub-Committee. I have to point out that the terms of reference for the purposes of this report must be the terms, which were declared before the Bombay Legislative Council on 24th October 1924 by the Member of Government in charge as follows:—

"In view of the conclusions arrived at during the period of war-boom that the land available in Bombay was inadequate having proved erroneous, this Council recommends to Government that a committee with a non-official majority be forthwith appointed to enquire into the activities of the Development Department."

4. The main issue to consider is whether the reclamation scheme as it was originally conceived and projected could be completed without serious harm to public interests. My colleagues have in their report declined to answer this one simple question. They have admitted that there will be loss on the scheme whichever way it is considered, but they have not tried to give any indication of the amount of such loss on the date when the books of the Department are to be finally closed. Taking their own Statement V (appendix) and taking the period of disposal at 55 years after land is ready for sale at the rate of 40,000 square yards a year (an area equal to the entire Ballard Estate) the loss as written back on 1st October 1925 is (33·89 *plus* 533·67) Rs. 567·56 lakhs. This huge sum means that in simple interest alone for all times to come every year Bombay Presidency would have to find Rs. 34 lakhs. This loss is not fictitious but real, because Government funds are borrowed funds and the benefit of liquidation in the case of limited liability companies and of bankruptcy laws in the case of individuals is not available to Government. The point to consider is that by immediate complete stoppage this loss, as will be shown further, would be (533·67—45) Rs. 488·67 lakhs. But this loss is very much increased by continuing. According to the most favourable presentation of the project by my colleagues in their statement III, this loss is increased to Rs. 19·488 crores. According to them the expenditure is as follows:—

Expenditure as on 1-10-25.		Receipts as on 1-10-25.	
488·67		178·66	
352·29		371·30	
840·96	*minus*	549·96	Rs. 291·00 lakhs debt left over as a dead loss as on 1st October 1925.

But in showing Rs. 488·67 lakhs as debt on 1st October 1925, credit is already taken for assets sold at Rs. 45 lakhs. If these assets are sold, they cannot be used again. A very small error therefore of Rs. 45 lakhs has crept in the official presentation.* This increases the debt left over to Rs. 291·00 lakhs, *plus* Rs. 45 lakhs=Rs. 336 lakhs. This amount (Rs. 336 lakhs) written down to 1951-52 when the sales are supposed to be completed, gives the figure of loss at Rs. 19·488 crores.

* This error, in which the majority Sub-Committee had fallen, and which they are now acknowledging, was discovered by me after they had fixed their report, and yet Sir Lawless Hepper as Chairman of the Committee tried to insinuate that I had a motive in not disclosing this error to them. I am, therefore, compelled to publish as an appendix correspondence that took place on the subject.

5. I speak of "loss" as it is spoken of in business at the moment when an enterprise is completed or abandoned. The clear indication out of these bald facts is that *it is unthinkable that the Scheme could be completed, as far as one can see into the future, without grave risk of heavy losses that will put an intolerable burden on the taxpayer of the province for all times.* The number of circumstances that can vary up to the moment of completion and final disposal are many and the thought of these adds an element of serious uncertainty, that would prevent any reasonably prudent businessman from going ahead and must induce him to cut his losses. My colleagues have skirted round this question and have declined to take the responsibility of advising Government to consider the project as such, hopeless on financial grounds. I, as the only non-official on the Sub-Committee and as a representative of the taxpayer, must do my duty and in view of the disclosures during the enquiry and careful financial calculations ask for the Back Bay Reclamation to be stopped here and now. I would consider the additional expenditure of a single rupee on the Scheme as unwarranted waste of public funds and dereliction of duty on the part of Government towards the population under their charge.

6. My colleagues have sought to minimise the loss by modifying the programme but their report leaves considerable doubt on the ultimate issue which is not justified by the figures in their possession. They recommend reconsideration of the Scheme in 1927-28 but this recommendation, is bound to mislead the public into a hope that there is some chance for the position being retrieved. I do not find any justification for holding out such hope and while I cannot for obvious reasons enter into any political considerations, that may weigh with Government such as the question of prestige, I feel strongly on mere business and financial considerations that it is a serious disservice to the public to recommend anything in any form which will obscure the fact that *the Back Bay Reclamation Scheme as launched out in 1920 is a ghastly financial failure.*

7. Subject to due emphasis on this fact and to there being no misapprehension about it, I shall examine further whether there are any means of reducing the great loss from the activities of the Development Department in this direction so far.

8. My colleagues have decided that "it is not necessary" to deal with the projects put forward on several occasions in former times. I think it must be stated that such earlier projects involved reclamation at a very low cost.

I must point out that the scheme, which was submitted by the Government of Bombay in January 1911, was turned down by the Government of India in terms that should have deterred any provincial Government less foolhardy than that of Sir George Lloyd from ever broaching the matter again.

"The Government of India replied on 14th October 1911, and said that before any representations could be made to the Secretary of State they must be satisfied that the works would be re-productive, and for that purpose there was practically no data available. The Government of India did not wish to question the accuracy of the skilled engineers who had advised the Government of Bombay, but their figures had not been placed before the Government of India, and all that could be said on a general review of the case was that large estimates of that type were particularly liable to be exceeded, and that even in Bombay experience of that type of reclamation on an open sea front was limited. On the proposal that the scheme, if undertaken, should be executed by Government in preference to private agency, the Government of India were not convinced on the information before them that the scheme, if undertaken, should be executed by Government in preference to private agency, and asked that the matter should be further investigated and finally they enquired what would be the cost of the detailed surveys and estimates which would be necessary before the scheme could be recommended to the Secretary of State."

Why the Government of India ever departed from the canons of wisdom embodied in their comments on the Government of Bombay's scheme, I do not know.

9. The Government of Bombay got a survey made by Messrs. Lowther & Kidd and secured a report from the Committee, which had been appointed for this purpose in 1912, to the effect that the scheme was not only financially sound but that it added to the beauty of the city.

The estimated cost at that time was Rs. 5·86 per square yard. The Government of India disapproved of the programme and were prepared only to sanction the recovery of 84 acres at a cost of Rs. 37 lakhs.

10. The Government of Bombay made another attempt by a larger and more influential Committee, which issued their report in 1914.

Views expressed before this Committee indicated that influential opinion was seriously divided on the need of reclamation, but many witnesses were impressed by the requirements for land for certain public and educational institutions.*

The specific recommendation of this Committee, however, covered reclamation of an area of about 100 acres.

11. In 1917 the Government of India for the third time turned down the proposal of the Government of Bombay and would not agree to the reclamation scheme for even 220 acres. Since then there was nothing whatsoever for the Government of Bombay to go upon in the nature of new facts except enquiries by a local syndicate and by an English firm for carrying on sectional reclamation on their own risk.

Sir George Buchanan in propaganda note on Back Bay Reclamation (price 2*d.*) says :—

"Since that date the scheme has been periodically revived and discussed, the extent of reclamation varying from the whole of Back Bay between Colaba Point and Malabar Point, an area of 3,576 acres, down to one of 200 acres, but it was not until the appointment of the Right Honourable Sir George Lloyd to the Governorship of Bombay that a serious attempt was made to produce a practicable workable scheme not only from the Engineering but from the Financial point of view.

This was finally accomplished and the sanction of the Secretary of State to the project received in 1920.

"As the filling is completed it will be covered with a layer 12 inches thick of dry earth and equipped with drains, roads, water, lights, etc., and after making ample provisions for playing grounds and open spaces two and a quarter million square yards will be available for building purposes, whilst on a very conservative estimate of land values it is confidently believed that *not only will the reclaimed work pay for itself but there will be a handsome surplus from sales.*"

12. The reproach for the launching out of the Back Bay Reclamation Scheme falls entirely on the Government of Bombay. Sir Chimanlal Setalvad, in reply to Mr. Haveliwala, said on the 14th March 1921 :—

"The real fact was that the Bombay Government put forward a scheme but the Government of India turned it down. It was after persistent efforts that Government were able to induce the higher authorities on this occasion to sanction the scheme."

From the moment that a report was called for in May 1919 from Sir George Buchanan, there was no effort on the part of the Government of Bombay to ascertain the views of public bodies or to consult public opinion generally. As a matter of fact the previous approach to influential and representative persons for their views on reclamation had yielded vague support to the idea of restricted reclamation for certain purposes in the impression that the costs were very low, that is to say, from Rs. 4 to Rs. 7 per square yard. Even in the earlier stages several public bodies and notably the Indian Merchants' Chamber had opposed the idea of reclamation.

13. This disregard of reasonable spirit of criticism from the public could not be better illustrated than by referring to the pertinent question raised by Dr. Sukhia, representative of the Bombay Municipality on the Advisory Committee, in his letter to the Department, dated 20th June 1921. Dr. Sukhia proposed that the following question be discussed at the next meeting of the Advisory Committee :—

"Whether the Back Bay Reclamation Scheme should not be abandoned for the present or postponed for at least five years."

In a reply under the signature of Sir Lawless Hepper, dated 25th June 1921, I find the extraordinary statement that—

"Whether or not the policy adopted by Government in regard to the Reclamation of Back Bay should be reversed is not therefore a matter which can suitably be discussed by the Advisory Committee."

* Some representative views before the Committee including views of Mr. Cowasji Jehangir and Sir Lawless Hepper are given in Appendix II.

The only body of non-official men, which was associated with the Department, was thus definitely debarred from discussing the scheme at a time when such discussions might probably have brought forward facts now elicited and saved three or four crores of rupees. The public of Bombay, even if they overlook the grave miscalculations and errors for which Government are responsible, must find it difficult to condone this studied disregard of public criticism and marked impatience with representatives of the public seeking legitimate explanations of policy. The fact that the Government now turn for advice and moral support to the same body spurned in 1921 can be only explained in my mind by the change for the better that has since taken place in the head of the administration of the province.

14. The secrecy, in which this work was carried on, was complete. Sir George Curtis, K.C.S.I., on July 15th, 1921, said before the Royal Society of Arts :—

" Great secrecy in the plans of Government was essential and when His Excellency placed the proposal before the Council, it took both the Council and the public by surprise. Accordingly it was decided to start a propaganda explaining exactly what the various projects were, and the paper which I am about to read forms a part of it."

In the speech of Sir George Lloyd on 3rd August 1920 before the Legislative Council, the mention of Back Bay does not come in till he gives the functions of the new Department which he is creating, in the following words :—

" Briefly, then, the Directorate will (*a*) carry out with the assistance of its engineering staff the Back Bay Reclamation Scheme and any other Reclamation Schemes which may be found necessary in or near Bombay City."

That a scheme of such magnitude should have been launched out by the back door with such a cursory reference before the Legislative Council indicates the autocracy of the late Governor, his unbounded confidence in his own business, judgment and in the light of subsequent events the ruin, which he has inflicted on the taxpayer of Bombay Presidency, to the tune of Rs. 4·88 crores and yet the Governor had the audacity to state :—

" My colleagues and I felt, as I always feel, that the right place to give information on a matter of this importance was on the floor of this Council to the honourable members who represent the Bombay Presidency, and I thought, therefore, that the public would forgive me if I withheld giving that information another two or three weeks so that I might present it to you personally here and hear your opinion about it."

15. St. Nihal Singh, the official propagandist, in his pamphlet, says :—

" Had the speculators learned of the action contemplated, the prices of land would have been rendered almost prohibitive by artificial inflation. These questions had, therefore, to be discussed and plans formulated behind locked doors. Such secrecy was indeed observed, that when the scheme to effect improvements on a sufficiently large scale to enable Bombay, within a few years, to make adequate provision for the requirements of advancing civilisation, was on August 3rd, 1920, laid before the Legislative Council in the form of a Bill authorising the Government to raise a loan for that purpose, it took the public entirely by surprise. After consideration by a Select Committee the measure passed through the Council without a dissenting vote."

16. It will be seen that the matter was practically rushed through in the Bombay Legislative Council. Mr. (now Sir) Purshotamdas Thakoredas, on July 15th, 1921, said :—

" The bill came before the Council of the Bombay Presidency at its concluding session in Poona last September, and it was considered desirable that it should be passed at that time, as otherwise it would have had to come before the new Council, which every one thought would require some time for settling down. As Sir George Curtis would no doubt agree, the Select Committee appointed by the Council did their utmost to get the bill through before the end of the session, and although there was some trouble in making the different interests affected take a common point of view, Government did carry the bill through the Council in all its stages without a dissenting voice."

On the 28th of February 1921 Sir Chimanlal Setalvad promised that :—

" I can assure the Council that when I come to move for the necessary grants for this Department, I propose to make a full statement to the Council as to the various items in this project..... Taking the estimated expenditure on it, the cost per square yard works out to about 10·15. Now taking the present valuation of land in the city, *on a very modest estimate*, the result of the reclamation would be a profit of at least *thirty crores of rupees to the city. It may be more, in all probability it will be more, and in certain circumstances it may even go to fifty crores.*"

In spite of this assurance the particulars available for the Council in the speech of the General Member were most meagre. Sir Chimanlal Setalvad in the Bombay Legislative Council at the time of passing the first budget of the Development Department on 14th March 1921, said :—

"As honourable members are aware, the question of accommodation in Bombay, house accommodation, accommodation for industrial purposes and accommodation for all other purposes has become for a long time a very acute question indeed. *The space is limited that is available in the island* and Bombay has grown very much and is growing every day. No doubt various palliative measures have been adopted from time to time. The City Improvement Trust has done a good deal in the way of opening up the northern part of the island but it has become evident that the time has arrived when the problem requires to be grappled in a bolder manner, than it has hitherto been done. It required a man of bold conception, of courage and sufficient driving force to put through a bold scheme and fortunately for Bombay we got such a man in our present Governor Sir George Lloyd. Soon after he took office he very earnestly devoted his attention to his matter and with the help and co-operation of the public of Bombay his Government has succeeded in inaugurating this Bombay Development Department for the purpose of grappling with this very urgent question of accommodation in Bombay. It took considerable time, Sir, to outline the activities intended and to obtain the sanction of the higher authorities, the Government of India and the Secretary of State, to this project. Ultimately the sanction was obtained and the Department was organised somewhere in October or November of last year."

From this it will be seen that the public of Bombay or their representatives in the Council or on the Advisory Committee could not take a very strong line of opposition. When the Government of Bombay speaks of a profit of Rs. 50 crores and when they assure the public that they have carefully considered it and that the higher authorities, namely, the Government of India and the Secretary of State, have also carefully considered it and sanctioned the project, it hardly lay in the mouth of the layman to cavil. Yet the instinctive feeling of the man in the street that everything was not right never completely left him.

17. It will be thus seen that it is wrong to say that members of the Bombay Council were enthusiastic in their approval of these programmes. Rao Bahadur G. K. Chitale, the most influential non-official, finding that there was no time to discuss such an important scheme and Government were not inclined to give another day for discussion, declared :—

"It is not possible, Sir, to do justice to the motion before us, and express our feelings. I think the feeling of the House is to allow the judgment to go by default. I oppose the grant, and will claim a division."

In this connection I cannot do better than quote Mr. M. R. Jayakar, leader of the opposition, to indicate that a very strong under-current of discontent with the activities of this Department has always continued :—

"During all these years this House has lost no chance of protesting against the extravagance of this Department, at budget and other times, nearly, at every session of this Council." (Bombay Legislative Council Debates, 24th October 1924.)

18. Sir George Buchanan's estimate of Rs. 367 lakhs for reclaiming 1,145 acres was accepted by the Government of Bombay, but has been up to the moment revised several times until the present estimate for completion without interest is Rs. 1,100 lakhs.

My colleagues have explained in paragraph 2 the reasons why the estimate jumped up from Rs. 367 to Rs. 702 lakhs. Assuming that the project was sanctioned sometime after September 1919 when the report was submitted, it becomes difficult to believe that the Government of Bombay did not realise that prices of material and of labour had already gone up considerably. In fairness to them I shall quote from their letter to Government of India, dated 4th December 1919.

"I am to add that the Governor in Council is prepared in view of a possible increase of labour or materials to add ten per cent. to the total of the Scheme as estimated by Sir George Buchanan, *and the total cost of the project may be roughly taken as 4 crores for the purposes of finance.*"

Sir Chimanlal Setalvad on 14th March 1921 in the Bombay Legislative Council also gave the expenditure at Rs. 4 crores.

19. I have asked the Department during the enquiry to make available to me all the papers submitted by the Government of Bombay to the Government of India giving the financial aspects of the scheme for the latter's sanction. From

such papers as have been made available to me, it is clear that the financial aspects of the scheme could not have been considered by the Government of Bombay at all carefully during the short period after the report and their submission of the project for sanction of the Government of India.

20. In spite of the assurance by Sir George Lloyd, the first occasion on which any mention was made of the increase of estimates from Rs. 367 lakhs to Rs. 702 lakhs was before the Indian Merchants' Chamber in September 1921. It is extraordinary that in the budget statement relating to the Department for the years 1920-21, 1921-22 and 1922-23, no mention is made of how the estimates of the scheme had increased. What public object was served by working in this mystery I cannot understand.

21. In the speech of the Governor before the Legislative Council on 3rd August 1920 one of the functions and the first function of the Department was defined as—

" to carry out the Back Bay Reclamation Scheme and any other reclamation schemes which may be found necessary in or near Bombay City. "

22. Prior to the formation of the Department certain important preliminaries had been undertaken by Government in connection with the Back Bay Reclamation Scheme. Messrs. Meik and Buchanan, having been consulting engineers for the project, arrangements were made during the summer of 1920 to place orders for the necessary plant through the Stores Department of the India Office. The Chief Engineer and the Senior Deputy Engineer were appointed and were associated with the consulting engineer in London in the preparation of detailed designs and specifications for the various items. An Executive Engineer of the Bombay Public Works Department was placed on special duty in Bombay to deal with certain preliminary investigations. Government secured the services of Mr. W. R. Davidge as Consulting Town Planner. Negotiations were made and finished with the Military Department for exchange of land. Sir George Buchanan was in Bombay from November 1920 to February 1921. The report for 1920-21 says :—

" Report received from India Office up to 31st March 1921 show that good progress has been made on the dredger and the intermediate pumping station. The pipe lines both floating and shore are also progressing and it is expected that some parts will be shipped shortly. The dredger is timed to arrive after the monsoon of 1922 when it is expected to have a compartment of the reclamation area ready for filling. "

23. The dredger " Sir George Lloyd " arrived in Bombay harbour on 31st March 1922. The report of the year 1921-22 mentions that the dredger is capable of dredging 2,000 cubic yards of clay per hour from a depth of 70 feet below water level and delivering the same through 5,000 feet of pipe line. The intermediate station, the " Colaba " can only assist this dredger to put this material forward another 5,000 feet.

24. It will be seen from subsequent reports that the output of the dredger " Sir George Lloyd " has actually been 540 cubic yards per hour instead of 2,000, and the length of the pipe line originally expected to be 5,000 has increased to 12,000 feet. In connection with the dredger it must be mentioned that the report of the Consulting Engineers speaks of trials, which were taken in England before the dredger came out here and these trials are described as " satisfactory ".

" The actual dredging was started on the morning of 8th December 1923, by His Excellency Sir George Lloyd and by the end of the year some 500,000 cubic yards had been deposited. The material obtained proved to be of much better quality than had been anticipated. In view of the material obtained Sir George Buchanan, during his cold weather visit decided that the construction of further bunds will not be necessary, an economy which will result in a saving of about Rs. 17 lakhs. (Report of the Working of the Development Directorate for the year ending 31st March 1924, page 2).

25. The public were misled throughout the period as to the liabilities, which they were incurring. In the report of the working of the Development Directorate for the year ending 31st March 1923, we find that satisfaction is expressed with regard to the detailed project estimate of Rs. 702 lakhs, which we are told is the same as the information supplied to the Indian Merchants' Chamber in September 1921. The report goes on—

" Much depends on the time required for the execution of the project, and, as to this, *all that can be said at present is that the indications are that a somewhat shorter period will be needed than was at first estimated.* The actual expenditure up to 31st March 1923 amounted to Rs. 2,79,91,168."

It is difficult to understand how the Department made themselves responsible for this statement, which from information in their possession they must have known to be false.

26. In dealing with the question of estimates from the original figure my colleagues have not drawn attention to the fact that the sanction of the Government of India was obtained on a scheme costing Rs. 367 lakhs. The sanction was irregular and opposed to the usual practice as will be seen from the following :—

"Under the rules of the Government of India for the carrying out of public works, the approval of my report, plans and estimates did not imply more than the accordance of administrative sanction to the scheme, and a detailed project estimate giving the fullest particulars under each head and sub-head should have been submitted before any actual expenditure was incurred.

"The preparation of this estimate would have taken a staff of engineers at least one year and when completed would have been valueless, for the same reason that contractors were unable to submit a firm tender, and as time was of importance, it was decided to proceed in anticipation of sanction and to prepare the detailed project estimate as soon as reliable data had been collected." (Report of Sir George Buchanan, dated the 11th February 1922.)

In their letter, dated the 4th December 1919, the Government of Bombay write :—

"The Governor in Council is confident that the Government of India will have little hesitation in accepting Sir George Buchanan's opinion. I am to add that the Governor in Council is prepared in view of possible increase of rates for labour or materials to add 10 per cent. to the total of the scheme as estimated by Sir George Buchanan and the total cost of the project may be roughly taken at Rs. 4 crores for the purposes of finance."

27. While the scheme was being sanctioned, prices were materially altering and wages were soaring very high towards the close of 1919. The Government of Bombay, if they had exercised ordinary business prudence, would have paused to reconsider the situation and they should certainly have gone more thoroughly into the issue when in 1921, the Chief Engineer gave an estimate of Rs. 702 lakhs nett. In spite of this increased estimate, it is extraordinary to read in Sir George Buchanan's report that the Government of Bombay ordered that the sea wall should be started at both ends instead of one, though this was a factor which materially set up the cost. Another warning that would have sufficed for a business administration was when the Government sanctioned a revised figure of Rs. 775 lakhs in October 1922.

28. The subsequent increase of estimate in the light of results of dredging at Rs. 1,100 lakhs was in spite of the facts ;

(1) that considerable savings had been effected by reducing the width of the sea wall from 16 to 12 feet ;

(2) and by doing away with the cross walls in view of heavier material pumped.

From the facts, which were placed before us, I have come to the conclusion that the purchase of additional pumping machinery including pipe lines amounting to about Rs. 28 lakhs was the result of the effort of the Department to complete the scheme as early as possible according to the schedule, but the ghastly failure of the original estimates and the changes in the circumstances of the city in the interval ought to have induced a reconsideration at a much earlier stage. The demand from the public for an inquiry into the activities of the Department had been put off by the Government. They also ignored the notices of resolutions on the subject in the Council. So far as the Department itself is concerned I think it is most extraordinary that the Advisory Committee attached to the Department, which is regarded as possessing varied talents and outside experience, were never consulted about the progress and financial vicissitudes of this large scheme. They had not been supplied with the different estimates, which the Chief Engineer prepared. They had not been supplied with the reports of the Consulting Engineer which were prepared every season. Not a word about the estimates or the costs appears in the several reports of the working of the Department, which are published annually. The only specific mention, which I find in one of the reports for the year ending 31st March 1923, says :—

"The detailed project estimate amounting to Rs. 7,02,43,321 nett (Rs. 775 lakhs) was sanctioned by Government in October 1922, the figure being almost exactly the same as that on which the information supplied to the Indian Merchants' Chamber in September 1921 was based. There is, therefore, no change in the previous forecast of cost per square yard. Much

depends on the time required for the execution of the project, and, as to this, all that can be said at present is that the indications are that a *somewhat shorter period will be needed than was at first estimated.*"

The last of this is a remark couched in a vein of extraordinary optimism at a moment when the Department were fully aware that there were serious difficulties ahead.

29. In the new project estimate prepared by the Chief Engineer in January 1925, in spite of the savings on the sea wall and cross walls amounting to Rs. 36,63,000, the estimate is increased by over Rs. 10 lakhs because of extra expenditure of Rs. 28,42,877 on the dredging plant.

"The excess against dredging plant is due to the fact that the plant consisting of two dredgers and one intermediate station provided for in the sanctioned project estimate has now proved insufficient, and it has become necessary to purchase another dredger 'Jinga' as a booster station for the 'Kalu' working in the Back Bay together with additional floating and shore pipes."

Departmental Work.

30. Assuming that the Government of Bombay had decided on reclamation with the best intentions, the grounds that led them to the decision for doing the whole work in one block and for doing it departmentally do not appear to have been sound. A portion of the work was of a nature for which tenders should have been called for and private enterprise requisitioned into service. If this had been done the entire burden of variations of costs after the fixing of the tender would have been removed from the head of the taxpayer.

Sir George Buchanan before the Royal Society of Arts on July 15th, 1921, said :—

"The whole work is to be carried out departmentally as, owing to the great fluctuations in the price of machinery, materials and labour, it was impossible to let a contract on satisfactory conditions, and although this arrangement involves a great deal more work for the Resident Engineer and his staff, it will probably in the long run be more economical."

In Sir George Buchanan's report, dated the 11th February 1922, we read :—

"Tenders were therefore invited on the percentage basis for the construction of 8,000 feet of wall from the Colaba end, but when received they were found to be without exception so unsatisfactory from both economic and technical points of view, that it was decided Government should itself carry out the whole work by direct purchase of machinery, materials and plant, employment, of engineers and workmen, and use of sub-contractors."

31. The entire bias of official opinion was for carrying out the work departmentally. The departmental system, which hopelessly broke down in connection with the chawls in the year 1922-23*, did not give more satisfactory results on the Back Bay, and the reports of the Consulting Engineers point to several delays which were avoidable in starting the work and occasionally speak of work which "if done by a contractor would not be accepted". The tenders referred to by Sir George Buchanan were not made available to the Sub-Committee in detail and the reasons for their failure was not indicated. It is not to be found in any of the reports dealt with. But I have come to the conclusion that, assuming that reclamation work had to go on, the second great mistake that the Government of Bombay made was to attempt to do it themselves. If the work had been done by contract, some of the risks at all events would have gone on the head of the contractors and no contractor would have accepted estimates, which broke down so hopelessly before the work was started. The inherent defects of the estimates would have, therefore, been brought out, if private enterprise had been requisitioned.

Irregularity of Accounts.

32. The accounts of the Department were not kept in a satisfactory condition. In paragraph 35 of his report, dated 11th of February 1922, Sir George Buchanan complains that—

"the accounts of the Back Bay Scheme do not appear to be kept on either one or the other of the systems described above. Although works estimates have been made, there is as yet no

* "During the year the system of construction by departmental agency was, as already mentioned, abandoned in favour of the contract system. The former method had much to commend it during the initial stages of the scheme, but, once, the necessary experience had been gained, the latter became preferable as more economical." (Report of the working of the Development Directorate for the year ending 31st March 1923.)

sanctioned project estimate. The Chief Engineer keeps no accounts, nor has he been furnished with up to date statements of expenditure by the accounts branch in order that he may see how matters stand. In this connection I wrote to the Chief Engineer on the 7th January, asking to be supplied for the purpose of this report, with a statement in some detail giving the total expenditure on the project up to date. . . . On 21st January, I received a statement of expenditure up to the end of October, which can hardly be called up to date, nor did it contain sufficient detail to be of any practical use."

This irregularity of accounts also came under the notice in other quarters and on 24th October 1924 the Deputy President of the Council, Mr. B. G. Pahalajani, exposed the financial irregularity of the Department by quoting from the Accountant General's report as follows :—

" The expenditure on several works in the Bombay Development Department has been held under objection for want of sanction to estimates as required by the Public Works Department Code. Regarding the huge Back Bay Reclamation Scheme, which has been in progress for 18 months it appears that arrangements are only being made to prepare a regular estimate in the absence of which no effective financial control is possible. In the matter of detailed working estimates for the Back Bay Scheme a similar negligence has been exhibited and officers have been allowed to start works including the construction of residential accommodation for themselves, without any attempt to get prior sanction to the estimates. In my report to Government, I have stated that I regard the above irregularities as sufficiently serious to be brought before the Public Accounts Committee, since no explanation is offered by the Reclamation Branch of its failure to observe financial rules. In the meantime I have requested Government (Finance Department) to issue stringent orders to the Development Department that in future no work should be commenced before the estimate is approved and that if possible further expenditure on works in progress should be suspended until detailed estimates are sanctioned."

33. Further on the 10th March 1924, Mr. M. R. Jayakar, in exposing the errors of the Department from the Appropriation Report of the Accountant General for 1921-22, said :—

" I cannot help feeling that we can offer my honourable friends only an impotent opposition. I wish we had the power to do more. I do not mind saying that if to-day we had the power, we would bring down the guillotine on this Department in a minute, without the least compunction, whatever the consequences. But as we have not the power, and as we are practical and sensible men, we wish to cut our coat according to the cloth, and with such a view I am making a practical suggestion. Let not Government make any mistake, let them know that a large bulk of popular opinion in this matter is very strong."

OMISSION TO CONSULT THE HARBOUR AUTHORITIES AND THE ROYAL INDIAN MARINE.

34. Sir George Buchanan in his report, dated 10th January 1923, writes as follows :—

" The successful reclamation of the enclosed area by means of pumping material dredged from the sea bed is the crux of the whole scheme. The sanctioned project provides for the dredging of material from the Harbour and pumping it through pipe lines laid across the Colaba Peninsula, but since that arrangement the Harbour Authorities have curtailed considerably the area hitherto believed to be available, the portion cut off containing according to the borings the most suitable material."

In his original report, 1919, he definitely indicated certain areas in the Harbour in a plan attached to the report and it was these very areas on which experimental borings were made by Mr. Kidd, the results of which were accepted by Sir George Buchanan " both in respect to quality and quantity ". It was in 1921 that the Chief Engineer received objections from the Bombay Port Trust and the Royal Indian Marine to these areas being dredged. As far as I have been able to discover, the Government of Bombay did not, for a period of 2 years after Sir George Buchanan's first report, take the trouble of ascertaining whether there was any serious objection to interference with the Harbour. After the objections were first raised, for a period of 2 years again the Department does not seem to have taken serious trouble of finding out whether anything could be done to overcome this obstacle. They had the knowledge of this difficulty with them for about 2 years before they held out hope to the public by the report ending March 1923,

" all that can be said at present is that the indications are that a somewhat shorter period will be needed than was at first estimated."

Both the Bombay Port Trust and the Royal Indian Marine are limbs of Government and in higher official circles schemes of Back Bay Reclamation must have been definitely known, even if they were hatched in secrecy so far as the public were concerned. Why none of these bodies showed an earlier inclination to warn the

Government of Bombay, or why the Government of Bombay did not choose to consult them about the programme has not been disclosed from the papers in my possession. But this single circumstance is of great importance because it leaves a loophole to the manufacturers of the dredger and it will probably prevent the Government of Bombay in their efforts to recover damages from the manufacturer of the dredger " Sir George Lloyd ", because the area specified with material of better quality is not available. As will be shown later this circumstance is responsible for the purchase of additional dredging plant and equipment on intermediate pumping stations including pipe lines amounting to Rs. 28 lakhs and more later.

35. The ground, on which dredging was preferred to dry filling on the score of cost, has proved absolutely fallacious, the cost having increased from 5 annas per cubic yard to Rs. 1-3-0. It was the dredging scheme which involved working of the whole reclamation block as a single enterprise.

The dredging machinery was taken from Great Britain in spite of the opinion of Mr. Kidd of Sir William Armstrong Whitworth & Co. that such plant had reached greater perfection in U. S. A. Allowing for the errors of the technical advisors and manufacturers in the specifications, it seems unthinkable that the Government should have accepted a bald statement of Sir George Buchanan that—

" I accept his (Mr. Kidd's) conclusion both in respect to quality and quantity of material."

Establishment Charges.

36. On this topic considerable controversy arose in the Bombay Legislative Council. I shall content myself by pointing out that Sir George Buchanan in his report, dated September 1919, calculated that the establishment charges would be 5 per cent. The Government, however, have sanctioned 7½ per cent. and Sir Lawless Hepper speaking in the Advisory Committee on 8th October 1924, pointed out that the percentage of establishment charges after the reductions, which had been effected, came to 6·01.

HOW THE PUBLIC WERE MISLED.

37. I shall now give an illustration of the very misleading impression, which each successive defender of the Department on behalf of Government has given from time to time.

On 28th February 1921 in the Bombay Legislative Council, Rao Bahadur G. K. Chitale said :—

" It is not for the benefit of the masses. The Back Bay Reclamation Scheme is primarily for the classes."

Sir Chimanlal Setalvad in reply said :—

" I am quite prepared to answer the question put by Rao Bahadur Chitale, namely, whether the Back Bay Reclamation Scheme will be for the masses or for the classes. The land produced by the Back Bay Reclamation Scheme will certainly be for people, who will pay for it. But Rao Bahadur Chitale will remember that thirty or forty crores of rupees, the profit which will be realised out of the land that will be reclaimed, will be available for ameliorating the condition of the poorer classes. That money will be available to Government ; that money will be available to this Council ; and you can do anything you like with it for the benefit of the poor and working classes."

On 14th March 1921, Sir Chimanlal Setalvad said in the Bombay Legislative Council :—

" The cost of reclamation is calculated to be about Rs. 10 including the cost of reclamation, the interest and the sinking fund. But even supposing we can get land for Rs. 20, making all liberal allowances for mistakes and miscalculations which we do not anticipate, still bearing in mind the present market value of the land, we would make a very, very big profit on that scheme. That, in outline, is the Back Bay Scheme."

Sir George Curtis on July 15th, 1921,

" put down the cost of reclamation at five million sterling. In return for this sum, Government hope to secure at the end of seven years four million square yards of building ground. Part of this will be ready in four years. It is beyond my province to suggest what the return per square yard would be some years hence. Recent sales, however, of land within half a mile of the area to be reclaimed show a return of £10 per square yard. Even assuming that the actual return secured would be only half of this, it is clear that the scheme is likely to be extremely profitable."

Mr. St. Nihal Singh in his propaganda pamphlet said :—

" Most of the land, which is being reclaimed is to be reserved for building purposes. Since, as a rule, the sites will command a view of the sea, and since they will be in the immediate neighbourhood of pars and playgrounds, their attraction will prove irresistable."

As late as 19th February 1924, Mr. Cadell as Finance Member of the Government of Bombay estimated the value of the area to be reclaimed on the Back Bay at Rs. 100 a square yard and said :—

" It is not sufficient to have good intentions only and I wish to explain that we have full confidence in our financial position.....It is calculated that the cost of the Reclamation Works including both Back Bay and East Colaba will fall well within the final estimate of nearly Rs. 8 crores exclusive of interest, and that if we sell to the public about one-third of the area reclaimed from the sea, we shall recover the whole outgoings of the enterprise, including interest with a very handsome balance in hand."

" In regard to the commitments relating to Development Department we have every expectation, as I have already explained, that the capital charges of the Back Bay Reclamation will be repaid within a period of 15 years and that these great works will be a source of permanent assistance to our revenue."

Having given a lugubrious description of the efforts of the Government of Bombay in developing Bombay, the Finance Member of the Government from his high place in the Council on the occasion of the budget let fall like an oracle the following piece of wisdom :—

" The citizens of Bombay may perhaps find some day that the Government of England may send representatives to inquire and learn from the citizens of Bombay how best to convert their aspirations into solid fact."

I do not think. The inquiry, which is overdue from London, is into the process, by which an irresponsible Government has involved crores of rupees of the public into unproductive channels, making a dead loss in order to satisfy, not the aspirations of the people, but of highly placed officials whose greed was for glorification.

On 10th March 1924 in the Bombay Legislative Council, Mr. Cowasji Jehangir said :—

" In the Back Bay Reclamation nothing can be done. It is admitted on all hands that we must go ahead and finish it. I do not wish to express an opinion as to the value of land to-day round and about the Reclamation. I leave that to honourable members who know the city of Bombay. I can tell you that the statement made by Government some two years ago to the Indian Merchants' Chamber that *the land on the Reclamation, when it is first ready for sale, will cost this Government Rs. 28 a square yard*, is a statement I am prepared to repeat to-day, and as I said before, it is a statement I hope I or my successor may be able with confidence to repeat when the Reclamation is completed."

On 10th March 1924, Mr. Lalji Naranji challenged the Department in the following words :—

" It has been stated that Government has got an offer of Rs. 50 per square yard of the Back Bay Reclamation area. Why should not this House welcome such a thing ? If there is an offer, let it be brought. It is merely bluffing the public. I will challenge the Government Member to bring out such offers."

Mr. K. F. Nariman on 10th March 1924 in the Bombay Legislative Council said :—

" Take it from any point of view,—economic, scientific, utilitarian,—this scheme will do irremediable harm to the interests of the future generation, and even of the present generation.

Sir Lawless Hepper on 10th March 1924, thought in reply that the criticism that the Government are engaging in highly speculative transactions, which were likely result in heavy financial loss—

" is largely inspired, I believe, by a lack of knowledge of the real conditions, whilst in the case of the Back Bay Reclamation it is probable that the echoes of the disaster which attended the earlier project in the sixties of the last century are partly responsible for the fears which have been expressed. But apart from this it must be recognised, for it cannot possibly be concealed, that there are powerful vested interests in Bombay which are, and must be from their very nature, definitely hostile to any measures calculated to bring about a general reduction in the value of land in the city."

The idea that all the public spirit and benevolence in the world is with the Department and that every critic of the Department is actuated with the worst possible motives has been given currency to for too long, and while the province of Bombay goes on finding immense sums to liquidate the losses, which have been made, they would have sufficient time to reflect on the motives of the different parties concerned.

As late as 24th October 1924, Sir Lawless Hepper said :—

" I believe it will be obvious and admitted that the Back Bay Reclamation can neither be curtailed nor eliminated from our programme. The lines and amount of reclamation are fixed

and determined by the sea wall, and of the four miles, which make up the total length of this structure some three miles are already completed. Does any one really imagine that it would be possible, or anything but ruinous and disastrous, to stop the work at this stage ? So far the work has been mainly preparatory, and the actual reclamation, that is, the production of reclaimed land, has scarcely begun. But the whole of the preliminary work has been completed and all the expensive equipment has been purchased. Is all this work and plant, on which Rs. 4,37,00,000 (including interest) has been spent up to 31st August last, to be scrapped and thrown away, just at the stage when it is beginning to accomplish its purpose ? It is not that the previous stake of affairs in Back Bay could be reverted to, if the work were stopped. You will have damaged Back Bay, without replacing it by the new and equally beautiful curve which the Reclamation Scheme gives it. The Marine Drive, the open spaces and playing grounds will never materialise ; nor will the sites for residences, for offices and public buildings. To stop the reclamation now would mean to throw away all the money that has been spent ; *to abandon all possibility of profit, or of even recovering the expenditure incurred* ; and to deny to future generations the room for expansion, and the amenities which this great scheme is designed to afford."

To what extent the Department has tried to mislead the public can be indicated by the fact that in the *ad interim* report dated 17th February 1925 prepared for the Advisory Committee by the Director, it is stated that—

" in regard to the possibility of financial loss, the expenditure has, up to date, approximately closely with the forecast, the total including interest charges, to 31st March 1924, being Rs. 412·39 lakhs, against the forecast figure of Rs. 421·16 lakhs."

I do not know which forecast is here spoken of, but it is necessary to point out that according to Mr. P. W. Monie, of whom the official propagandist speaks as " a civilian of remarkable financial ability ", in his letter to the Indian Merchants' Chamber, dated 18th July 1921, it is said :—

" Out of the total sum of Rs. 1,315 lakhs, which was estimated in March 1920 as likely to be required for Government schemes during the following five years, only Rs. 300 lakhs were assigned to the Back Bay Reclamation.....I am to add that Government do not anticipate having to borrow from the public for any long period more than Rs. 4 crores in all for this particular scheme."

It will be seen that the actual debt under the Back Bay Reclamation Scheme to-day is Rs. 5·33 crores and the scheme cannot be completed without finding further funds to the tune of Rs. 20·25 crores. To say therefore that they have gone according to programme and on the score of finance there should be no anxiety, is to mislead the public. According to the period of completion of the scheme as originally thought of, the whole was to be ready by 1927-28. Throughout the discussions Sir George Buchanan speaks of six seasons of dredging to complete the programme. The Chief Engineer has now put the completion period to 1943-44 (Statement III). While the outlay, therefore, nominally remains the same up to 31st March 1924, the achievements are woefully behind. The expenditure has approximated closely to the forecast, but the work has not.

SUPPLY OF LAND.

38. The factors to consider in the question of disposal of reclaimed land would be how much vacant land there is in the city of Bombay offering for sale and whether there is any serious shortage. In this connection the figures, which have been available so far, are very eloquent. The area of land in the hands of public authorities alone comes to 100 lakhs square yards, or ten millions square yards, as will be seen from the following statements :—

Land still available for disposal or likely to be available for the future.	Area.	Approximate value.
	Sq. yds.	Lakhs. Rs.
(*a*) Improvement Trust	64,34,900	1206·01
(*b*) Port Trust	8,85,854	437·13
(*c*) Municipality	9,94,766	532·00
(*d*) Bombay Baroda and Central India Land, Colaba ..	1,05,577	42·23
(*e*) Great Indian Peninsula Railway do. ..	34,525	13·81
(*f*) Military Land in Fort and Colaba	1,71,427	267·13
(*g*) Colaba Land and Mill Company	55,822	22·33
	86,82,871	2520·64

All this land has got to be sold and is with the exception of (*g*) in the hands of bodies for which the taxpayer is ultimately responsible. There are besides the following areas most of which though occupied at the moment, must provide room for expansion for the city in the future :—

	Sq. yards.
1. Milch cattle stables	97,128
2. Loco. and carriage workshops of the Great Indian Peninsula and Bombay, Baroda and Central India Railways	9,43,013
3. The Mint	52,404
4. Royal Indian Marine Dockyard	1,75,525
5. Sailors' Home	12,562
6. The Fort and The Arsenal	60,263
7. St. George's Hospital and European General Hospital	78,609
	14,19,504

Compare with this, figures of land disposed of in the last quarter of a century.

Land disposed of during last 25 years.	Area in sq. yds.	Value.
		Rs.
Improvement Trust	32,42,700	6,70,11,800
Port Trust*	3,52,600	98,97,000
Total ..	35,95,300	7,69,08,800

39. When it is realised that the period of 25 years past saw two great pre-war booms and one unprecedented post-war period of prosperity, the average price of between Rs. 21 and Rs. 22 does not raise serious hopes for the future disposal of lands in the hands of any public authorities or private individuals. Disposal over areas conveniently located with reference to centres of business or residence at low rates offers therefore no parallel to the rate of disposal over an isolated area at high rates. It must be also remembered that lot of this land was " sold " in the sense of being disposed of on lease at a rental which to the best of my knowledge was well below 6 per cent. The last twenty-five years have seen unchecked expansion of population and wealth in Bombay. With the decay of industry, with interior regions doing direct trade, with new ports like Karachi and Vizagapatam diverting traffic, with increased cost of living and increased trade charges at the port, etc., it is impossible to predict the same or any near rate of expansion for the next quarter of a century. The area disposed of comes to 140,000 square yards a year, part of which must be accounted for by quasi-compulsory displacement of trade and a considerable part to house the displaced population from the demolition of insanitary areas. The number of such population is not likely to increase in future and land for sale must in future rely on natural expansion of the city or on growth of prosperity inducing people housed in one room tenements to seek a higher standard of accommodation. On both these issues optimism would be unjustifiable. Apart from the question of new land from reclamation, this raises a serious question whether the finances of the public bodies concerned will stand the strain of diminished demand considering that they still have for disposal land more than double of what they have passed on to the public.

40. There is no estimate available of vacant land in the hands of private individuals but it must be a very large figure when taken as a whole. There is also plenty of land, likely to go out of its existing use (*e.g.*, the tanks near most mills as they go on to electric power) or imperfectly used such as sheds and one storey buildings. Taking the total of land then at a round figure of well over one crore square yards still available, the idea that in Bombay there is dearth of land and development is retarded on that account becomes an exploded myth. Supply of additional vacant land to Bombay ceases to be a matter of public service and if it involved an outlay of public funds becomes positively mischievous. I must assume that the Government of Bombay were not in the dark about available land and hence find it difficult to understand how they could through their various official spokesman, grow almost lyrical in speaking of the need for more land.

* " The total area of land let on leasehold at the end of the year was 13,77,684 square yards." (Administration Report of Bombay Port Trust, 1923-24).

Sir George Lloyd before Bombay Legislative Council 3rd August 1920, said :

" For construction of this magnitude, the first requisite is an adequate area of suitable land. This, as I have already mentioned, is available for 36,000 rooms in the areas covered by the Improvement Trust schemes. *The balance can, it is believed, be provided by reclamation in certain parts of the island.* I will not at this juncture weary the Council with the detailed calculations, or our justification for those calculations."

Sir Chimanlal Setalvad in securing assent of the Bombay Legislative Council to the Development budget on 14th March 1921, said :—

" As Honourable members are aware, the question of accommodation in Bombay, house accommodation, accommodation for industrial purposes has become for a long time a very acute question indeed. *The space is limited that is available in the Island.*"

St. Nihal Singh in departmental propaganda said :

" The anomalies created by the policy of ' laissez-faire ' owing to inordinate pressure of population on a confined space will thus be removed."

" This land which is being built up in the Back Bay will give the people of Bombay, for the first time, adequate space for recreative purposes. Altogether 145 acres have been permanently set aside for open spaces—parks and playing fields. "

" Bombay owes most of its civic problems to the rapidity with which its population has expanded in a comparatively small area invaded by arms of the sea. The rate of growth, especially during recent years, has made it impossible for it to catch up with the difficulties thus created. The need for building sites became clamant.....The Fort in time became overcrowded with buildings erected wherever sites could be bought on advantageous terms in a city where land values were continually rising owing to increased demand and inflation by speculators.....As building sites became scarcer and land values rose, open spaces vanished. There is in consequence hardly a metropolis in the world of the size of Bombay so inadequately provided with ' lungs ' play-grounds and recreation parks."

" As population increased it burst beyond the bounds of the water-girt city and spread, without plan, across the creek to Salsette and even to the mainland. In some localities rice fields continued to cover acre upon acre, while other places became congested with suburban villas."

" In the Improvement Trust Scheme at Worli 1,350,000 square yards of building space will be made available at a cost of Rs. 1,76,00,000.....

" When this is done Bombay will cease to be an island and as supply catches up with the demand, and in course of time overtakes it, it is hoped rents will fall automatically."

The Development Report for 1920-21 says :—

" The reclamation schemes and the various projects of the City Improvement Trust will provide considerable room for expansion for the wealthy and upper middle classes for residences, offices, hotels, etc., as well as for Government and public buildings.....There remain, however, the middle and lower middle classes for whom the provision of decent housing accommodation in the Bombay Island is becoming a matter almost of impossibility, owing to the high cost of land. The existing suburbs and facilities for transport are altogether inadequate, whilst the development of much larger suburban areas is important if educational establishments, requiring hostel and playing ground accommodation, are not, in the future, to occupy an undue share of the area within the narrow confines of the city."

Sir George Curtis before the Royal Society of Arts said :—

" Recognising the fact and realising that it is necessary for the future expansion of Bombay that a large area should be acquired and made available on easy terms, the Government of Bombay have recently notified for acquisition an area of 7,500 acres. The island proper must shortly be overcrowded."

41. The Government of Bombay, therefore, confidently expected that the available vacant land in Bombay city would be all shortly built over. The fact that this vacant land considerably exceeds one crore square yards and, taking even the ridiculous estimate of Rs. 50 per sq. yard, the Government of Bombay either expected that Rs. 50 crores will be spent on buildings alone and another Rs. 20 crores on land in a short time, or they never troubled to go into any reasonable calculation at all. On the basis that all this land will be built over in the city, they acquired between fifteen to sixteen thousand acres in the suburbs. The bulk of this land is now de-notified, which therefore would indicate that the Government of Bombay have abandoned the heresy of land shortage and therefore in the light of this their attitude in persevering with the Back Bay Reclamation Scheme must appear to be curious. This withdrawal is a mere exercise of public authority in public interest justified by law. But had it been an actual purchase, there would have been great loss.

42. Out of the 10 million sq. yards, which I compute to be vacant land, altogether 64,34,900 sq. yards are of the Improvement Trust. A portion of this is temporarily let out in the same manner as land belonging to the Municipality. The Port Trust land is almost wholly given out on lease.* My colleagues have ignored the fact that when the question arises of re-leasing lands in the Port Trust, considerable difficulty will be felt if other land is created elsewhere for suitable use. The possibility of a loss then to existing public bodies for whom the taxpayer is ultimately responsible must be definitely considered and taken into account against any tendency for calculating results on a narrow departmental basis. This position did not escape the notice of shrewd men, whenever the question of reclamation was discussed and I shall content myself by quoting the view of Mr. J. F. Watson, Chief Engineer of the Improvement Trust, who said before the Committee of Enquiry in 1914 that :—

"I consider that a reclamation on the scale at present suggested is distinctly premature for the following reasons :—

(*a*) The estimated financial results of the scheme are in my opinion, far too sanguine, and cannot possibly be lived upto. The Trust has during its period of existence leased annually an average of about 50 thousand square yards, having an average value of 10 lakhs of rupees ; this includes sites for both residential and business purposes, and it is obvious that the capital invested for the latter purpose is not available for the reclamation in Back Bay. Again the Trust figure includes a lot of very low priced lands which are bought by small investors and it need hardly be pointed out that capital from this source is not available for the reclamation. Therefore it may safely be assumed that the leasing of 60,000 square yards of land at Rs. 25 per square yard every year is quite outside the range of practical politics.

(*b*) It seems to me that not only would such a reclamation as that proposed hit itself very badly financially but it would also have an adverse effect on the financial position of the Improvement Trust, and would prevent its doing as much useful work as it otherwise would ; because there must be a more or less definite average amount of capital in Bombay available annually for investment in lands.

Supposing we assume that the amount is Rs. 50 lakhs (exclusive of the amount to be spent on buildings to make the land revenue producing). There are three parties in Bombay at present interested in supplying the land for the investment of the abovementioned capital, *viz.*, the Improvement Trust, private owners and the Port Trust ; in addition to these, there is Salsette claiming a portion of the capital for its development. If now a fifth party is added claiming, say 10 lakhs of rupees per annum (which is assuming that the reclamation is sold at the rate of 40,000 sq. yards per annum instead of 60,000 sq. yards) it is obvious that the other four must lose heavily and the Improvement Trust being the biggest landlord will lose most."

These sound views by officials of the Improvement Trust were also expressed by Mr. G. W. Owen Dunn before the Royal Society of Arts when Sir George Curtis expansively justified the Back Bay Reclamation Scheme. Mr. Dunn said :

"He was a little doubtful about the financial side of the scheme. When such a huge area of building land was placed on the market, almost at once the result might be a slump in land values which would upset all the financial calculations. He hoped that would not be the case. Bombay was exceedingly prosperous at the present time, as was the case during the American civil war, but after that war there followed a great period of depression, and such periods might come again, although he trusted that that would not be the case. He hoped the new schemes which had been taken in hand would make Bombay even more beautiful than at present, and be the great success Sir George Curtis thought they would be."

43. The position now is this. That public authorities as a whole are holding land, a portion of which is valued at Rs. 25·20 crores. Considerable period of time must elapse before this land is taken up by the public and money found for building on. During all this period interest is being lost on the very large outlays, which have been made. Over-supply of land could not be conceived to be greater than what it is in Bombay and as the taxpayer is ultimately concerned with regard to any losses, which may be incurred, it would be very unwise to attempt to add any additional land to the city by the reclamation. It is possible that, if called upon, the various public bodies concerned would probably show that they will more than recover the outlay, which they have made on these land schemes. The recovery of this outlay will transfer the burden to the head of the purchasers of the land and through them to the dwellers of the city. Whichever way therefore

* "The total area of land let on leasehold at the end of the year was 13,77,684 square yards." (Administration Report of Bombay Port Trust, 1923-24).

the matter is looked at, no attempt should be made to increase the supply by the very expensive land, which will be turned out in the Back Bay, because by doing so the amount of money, which would have to be recovered by sale of land by public authorities would be increased. The position would be as follows :—

	Crores. Rs.
Value of land to be sold by the Improvement Trust, Port Trust and the Bombay Municipality	25·20
Total value to be recovered by completing the scheme as per Statement III based on Chief Engineers' Estimates	25·58
Grand Total to be recovered by public authorities	50·78

These figures must make any serious publicist pause and realise that a change in public policy of the Government of Bombay in the matter of supply of land to the city is inevitable.

44. Even my colleagues recognise that this very large area must in some degree affect the prospects of the disposal of the land on the reclamation.

They however think that " this land will not compete with the disposal of the reclaimed land being of a different category".

I cannot concur in these conclusions.

Statement showing land that will be available for disposal at Colaba :—

	Sq. yards.
(*i*) B. B. &. C. I. Railway land (net building area)	105,577
(*ii*) G. I. P. land „ „	34,525
(*iii*) Military land „ „	32,590
(*iv*) Colaba Land Mill „ „	55,822
(*v*) Bombay Port Trust „ „	40,016
	268,530

There is besides about 138,837 sq. yards belonging to the Military Department, bulk of it at Queen's Road that will directly compete. I have not heard in reply to my diligent enquiries, if any transactions have taken place or even any serious enquiries made for these lands hitherto. The question then is, with 407,367 sq. yards thrown on the market, would it be considered advisable to proceed with the reclamation which will put on the market an additional area of 22,00,000 or even of 3,60,000 immediately abutting and in the same neighbourhood.

45. Whether the other areas will compete or not cannot be considered superficially by mere contiguity on the map. There is a common " market " for land subject to all the vicissitudes as markets for any other article and land values decline or advance generally in response to various economic forces. In analysis the situation can be studied by considering :—

(*a*) the investors, and

(*b*) residents, though in practice all factors get duly discounted in the final value of land.

There is at any particular time a certain amount of saving in the hands of the community seeking investment and Government loans, trade, industry (shares) and land or built property compete for this. Various classes of investment appeal to investors according to the security and yield and their own confidence which varies with their knowledge and previous experience. If property in land in conjunction with the buildings yields less in comparison to, say, Government paper, having regard to all outgoings in the form of rates and taxes and vacancies or unpaid arrears of rent, then land values decline all over. Money seeking investment in reclaimed land in Back Bay has to be diverted from other investments by the temptation of a higher return. If the return to investment in other lands is better, the offer of these other lands for sale or lease must affect the demand for land on Back Bay. To argue otherwise is like the argument of children in a family that because they have asked in any particular month for more books, more clothes and more joy rides or cinemas, and because these things are different from each other, therefore the common purse of the papa will not feel the pinch !

46. Possibly my colleagues in arriving at their conclusion thought that residences for one class did not compete with residences of another class. In fact economic competition acts through each class competing for utilities and amenities with the class immediately next to it. But the competition reaches right to the bottom.

47. It was on this basis that Sir George Lloyd claimed that the Back Bay reclamation would do good to the poor people. He said in his speech to the Indian Merchants' Chamber on the 9th of August 1921 :—

"There seems an idea that you can provide housing for the population of a city in water-tight compartments,—that a housing scheme for manual workers profits only that class or that a housing scheme for business quarters profits only the business class. A moment's reflection will show the error of that belief. All populations are fluid and relief given in one part is indirect relief given to all."

The same logic when inverted and applied to conditions, which have always been there, but which Sir George Lloyd's Government were unwilling to recognise, comes to this. If there is a very large area suitable for building, for housing of various classes available in the city, any additions anywhere must affect the prospects of that area and *vice versa* the existence of that area must affect the prospects of reclaimed land on Back Bay. Indian rich men live not only in Malabar Hill and Mahaluxmi, but in crowded parts like Fort, Kalbadevi or Mandvi, or in outlying places like Mazagon, Mahim, Andheri, Ghatkopar or Borivli. Englishmen, whose standard of life is better than the rest of the population, live not only in Colaba, Ballard Pier and Malabar Hill, but in Byculla, Matunga and Pali Hill. All these places even as considered in relation to the same class of residents, compete with one another.

48. If Back Bay reclamation land and flats built on it are offered very cheap, it will reduce the demand on existing areas of better residences everywhere. On the other hand if the land is priced high and rents of flats are heavy on the proposed reclamation, the areas already in occupation will continue to receive the patronage of residents and in this way *directly* compete with the Back Bay.

49. Other factors must be considered in determining the competition of areas not abutting the reclamation land. Improved roads and motor facilities make residential areas outside like Mahim, Bandra, etc., more attractive and take away the demand for land in the city. The electrification of suburban lines is a single factor of great importance having a tendency to reduce demand for land and land values in Bombay everywhere, but is bound to hit more new areas about to be placed on the market. The Worli estate of the Improvement Trust,—in a manner of speaking an extension of high class localities of Mahaluxmi and Peddar Road,—offers amenities, after the building of the new bridge at Mahaluxmi, which in my mind must enable it to compete directly with the Back Bay land, because it is clear that the development of both these schemes cannot proceed simultaneously without hitting each other.

50. Further relevant consideration is the experience of the past in the matter of expansion of population in the different wards. From this it will be seen that the growth of population for the past 30 years has been negligible in the A ward notwithstanding the addition of Colaba Reclamation and the Ballard Pier. Any assumption that population seeks larger residential areas near the place of work, *i.e.*, in or near Fort, is absolutely unwarranted as will be seen from the following statements :—

TABLE A.

Ward.	Total population as entered in Census Reports of			
	1891	1901	1911	1921
A	64,819	53,642	67,859	66,445
B	1,52,275	1,30,045	1,30,358	1,28,697
C	2,06,372	1,55,256	1,83,400	1,98,384
D	97,329	77,410	1,11,055	1,44,174
E	1,80,425	1,80,871	2,26,470	2,70,552
F	54,404	68,127	95,221	1,39,571
G	43,998	72,974	1,20,103	1,65,216
Harbour and Dock ..	....	....	....	....
Railways	....	....	....	....
Homeless	22,142	37,681	44,979	62,875
Total ..	8,21,764	7,76,006	9,79,445	11,75,914

51. The Governor of Bombay on the 9th of August 1921 tried to answer the critics of the Back Bay Scheme, who characterised the project as unnecessary and impracticable and financially unsound. Amongst other things he said :—

"Now gentlemen, we have got to build before we can destroy. When those business quarters have got to be destroyed, where are the business facilities they offer to be replaced ? No one can give me an answer without Back Bay. It is impossible. You will not in any great city in the world move the heart of a business centre any great distance ; you may tempt it to move by half a street in one direction or another but little more ; everything centres round the stock exchange, the financial quarter and so on, and here as in the city of London business goodwill, interest and habit render big movement impossible. If that is the case,—and it is indisputably the case,—where in the Fort,-in proximity to the business centre, are you going to replace business quarters destroyed, or provide for the expansion of Bombay trade at reasonable cost. I repeat the trade of Bombay and the growth of the City is not going to stand still. It is my duty to do everything to encourage its expansion. What alternative from the business point of view is there, to provide large areas of new and cheap land for such purposes ?..... Its future largely depends upon business being able to be carried on cheaply, and for this purpose office and housing in the business quarter, not at fancy rates but at low rents, is essential to the wealth and prosperity of the city."

I cannot do better than quote from the speech of Mr. Lalji Naranji on 10th March 1924 in the Legislative Council on this subject :—

"But during the time there is so much stringency of money owing to the several heavy capital commitments, he (the General Member, Mr. Cowasji Jehangir) must take care that he goes on at a very reasonable speed.

"Another thing I wish to point out is that during the general discussion he mentioned that he was going on with his schemes for giving more light, more room, more air, but I will ask h m to take his own instance. He has got a building newly built in Churchgate Street in the Fort area of this city. He has told us that Back Bay is being developed because of shortage of offices. He himself has got a new house in Churchgate Street which honourable members will see when passing through that street. He has put a very big board 'To Let'. He has been fortunate enough to get a foreign bank as one of the tenants,—he has got a Japanese Bank as a tenant,—and I am glad and I congratulate him that he is going to get some money from this foreign bank, but he is not going to get any money from our own people in rent which they cannot afford to pay. Has he got sufficient tenants ? I do not think he has, and it may be due to the prevailing depression in trade. But this house which is called the "Ready-money House".....

"The Honourable the President : May I draw the attention of the honourable member to the fact that that house belongs to the father of the Honourable the General Member ?...

"Mr. Lalji Naranji : But he is the future Baronet and so it belongs to him. He is the residuary legatee. I am simply quoting an instance. If that is his experience, why should Government go on developing the area when offices are not required ? How many houses are vacant there in the Fort area ? Then there is at Colaba the old cotton green. Why not depend on them ? Let him come before this House next year and say that all this land has been disposed of and let him justify it and then ask money for further development. As regards the Fort area in his speech the Honourable the Finance Member has justified the statement that there is shortage in the Fort area. But I challenge him to prove that there is shortage in Fort area. I wish that there may be so much trade as to cause shortage in the Fort area ; but Government was deceived by the speculators' false demand that was created during the war time and they are still thinking that they are justified in continuing the scheme at this speed and that they will get nearly eight crores from the scheme. I appeal to the Honourable the General Member that instead of arguing with me, he should cut down this grant and stop the progress of his work to the extent of the demand of land that his department produces. From the figures that I have placed before him and the House, the House will be satisfied and the Honourable the General Member will also be satisfied that I have brought this motion in the interest of right economy."

52. As already indicated the demand for residential area in the Fort is neither great nor on the increase. Since the land would be costly on whichever figure it is ultimately decided to sell it, it may be used for residential purposes for wealthier classes. My colleagues in the Committee have mentioned that the reclamation when completed would give them 1,800 plots of 1,200 square yards and taking this land at Rs. 50 and assuming that the flats were built upon it, they are of opinion that the rent of each of these flats will be Rs. 450 a month. Assuming, however, that the calculation is correct before considering how many such new flats may be taken in a year, we have to deal with the factor for selling prices of land taken at Rs. 50 per square yard. This being, according to the Department the cost price,

it implies that either there is prior disposal before the final completion or there is a quey of investors ready with the money with them to take it over from Government, as soon as the land is ready. This assumption would imply that the public of Bombay is willing and have the resources to pay down a sum of eleven crores or with interest Rs. 25 crores for land on or before the completion of the scheme.

53. According to the number of square yards to be disposed of per year being taken at 60,000 and 20,000 respectively, the number of flats added would be 300 or 100 per year. The question for the public to consider is whether 300 new flats with such high rent can be absorbed every year for a period extending 100 years. The calculations of Rs. 450 a month would be further altered by the fact that the disposal of 60,000 square yards a year would mean realisation at something like Rs. 125 per square yard, and if, as I think proper, 20,000 square yards are assumed to be disposed of every year, the land will have to be sold at Rs. 300 in order to recoup Government the actual outlay without interest.

54. Coming to the final argument it comes to this, that the Government of Bombay will be obliged by any project for continuing the scheme to incur a heavy loss per square yard for the area reclaimed of either Rs. 75 or Rs. 250. By doing so, they would be subsidising, if they can continue to find the money, residential classes which use such flats, and I seriously doubt that public opinion will allow this to be done.

55. Whichever way the scheme is examined, a conservative estimate of the amount that should be sold must be made, and, taking that estimate at 20,000 square yards, which I consider proper, it seems absolutely hopeless for the Government of Bombay to be able to dispose of land on the reclaimed area on an average at Rs. 300 and over per square yard. The cost of the flats will be prohibitive even for officers of Government paid on the best scale when converted into flats and rented out with the usual calculations allowing interest at 7 per cent.

56. These calculations then point to a definite loss in completing the scheme. The question of calculating the loss did not appeal to my colleagues, but I consider it essential that such calculation should be made on the data available in order to prevent any attempt being made a second time to mislead the tax-payer. It is very necessary to point out that by continuing the programme of the development to completion, the loss will be increased manifold. My own estimate is that loss will exceed Rs. 100 crores if the scheme is completed, but I am prepared for argument to accept the findings of my colleagues as to the period of disposal indicated by them in statement V. Taking 40,000 being the area disposed of every year, it would take 55 years to complete the scheme and by their computation loss is put down at (533·67 *plus* 33·89) Rs. 567·56 lakhs as on 1st October 1925.

57. As interest has to be paid throughout this period on this loss and the receipts are already computed in arriving at the loss, this amount would have reached when all land is sold off the gigantic total of Rs. 181·33 crores. The human mind is staggered at a figure like this, of which we only heard during the late war. Even this figure is on an estimate based on disposal of land every year equal to Ballard Estate for the next 55 years after the land is ready. There could be, therefore, no doubt about the desirability of immediate and complete stoppage and any suggestion that the matter is open to reconsideration at any time in future might involve added liability over the present figure, which at least is known and definite.

58. One of the relevant factors to consider seriously in the matter of disposal of land either in reclamation ground or in the hands of the public authorities is the cost of building. After a careful enquiry the figures of cost per square yard were given by the Improvement Trust as: Dadar area Rs. 205 per square yard, Chowpatty Rs. 203 per square yard. For the Colaba Reclamation I was given a figure of Rs. 200 a square yard and in the Ballard Pier the cost of building has been indicated as from Rs. 500 to 750 per square yard. The figure which my colleagues in Sub-Committee have shown for building flats in the Back Bay Reclamation area is Rs. 250 per square yard. It would be unsafe to take anything lower.

The following table will indicate the amount of new money which Bombay will have to find according to the area disposed of every year :—

Area of land—sq. yards.	Annual requirement of Money for Building at Rs. 250 per sq. yard.	Period of disposal. No. of years.
	Rs.	
100,000	2,50,00,000	22
60,000	1,50,00,000	36·6
40,000	1,00,00,000	55
20,000	50,00,000	110

This amount will have to be found according to the area disposed of in addition to the cost of land and without any reference to the money called for remunerative buildings in other parts of the city. Figures of the total amount of money spent by Bombay every year on building were not available but if they could be collected from the Executive Engineer's Department of the Bombay Municipalty even as a rough estimate, they would give the utmost economic limit of possible outlay on buildings during the next few years. As this money has to be divided on properties which may spring up in different parts of the City, an under-current of conflict of interest between the various public bodies is unavoidable and greater degree of co-ordination of effort, than what can be seen at present, is desirable.

59. In dealing with the question of disposal the point that has to be seriously considered is the building costs in the city. Building costs comprise building material and building labour and if the Government of Bombay were to be told that they are responsible for the serious increase in the cost of building material as well as building labour, they would probably stand aghast at the harm, which they have done to the residents of the city. Behind the demand for increased rents was the undeniable economic fact that the cost of erecting new buildings had grown so high that in order to extract a reasonable return on capital so invested, the rent charged would have to be heavy. The rent of these marginal additions to house accommodation in Bombay naturally governs the rent of all existing premises. The Government of Bombay established the Rent Act and for the time being prevented economic adjustments, but they were by their development activities in the meanwhile doing everything possible to induce higher rents. After a careful enquiry with builders and estate agents generally, I have come to the conclusion that the main cause of the rise in value of building materials and building labour in Bombay over and above that which should be indicated by a general rise of prices, was the building activities of Government. I am equally convinced that the moment the Development Department as a Department is closed and the existing chawls handed over to the Improvement Trust for being taken care of and the Back Bay reclamation stopped, prices of building material and the wages of building labour are likely to show reasonable decline in keeping with the decline of prices and wages in other directions. When this happens, building by private individuals on lands at present lying vacant and unused will proceed on definite calculation of return to investment. The position at present is that the progress of building for residential purposes is practically at a standstill, because costs are heavy and rates have become prohibitive. It is a vicious circle for Government to have reckoned the high rents of the boom time and even now to take the rents of new buildings as a basis for the inference that there is dearth of housing.

60. Since vacant land is of no use except with buildings on and since so many public authorites are vitally interested in disposing of vacant lands, I suggest that a small public enquiry should be instituted at once for going into the question of the costs of building material and for finding out at which stage of labour or transport, the costs have increased and whether any means could be devised for reducing them. This has to be done in any case, even if the Back Bay reclamation is stopped. The manner in which high building costs act prejudicially is by increasing the cost of living in Bombay and by thus puting off the population which would otherwise come and settle here. The on-costs in agency and trade as well as in industry also tend to increase by the same ratio and again become a deterrent to the increase of trade and industry. The factor most directly affecting the return to build property is the local rates and the increase of these rates during the

last few years may have been justified by the needs of municipal finance, but has certainly hit every other public body by turning away capital, which would have been sunk in the building trade, to fields more remunerative of offering greater certainty as to principal and interest.

DISPOSAL OF LAND.

61. I have asked the Department whether any forecast was ever prepared of the period of disposal of the land or of the rate of sale per square yard. It appears that the Government of Bombay never considered these questions at all.

The nearest approach to a calculation is seen in a letter from the Government of Bombay, dated 4th December 1919, in the following words:—

"Taking the area to be reclaimed at 1,145 acres the cost of reclamation and equipment works out under the present scheme at Rs. 6·63 per square yard. Assuming however that of the total area reclaimed 400 acres are required for roads and parks, the net area available for building is 745 acres, so that if the charge for the whole scheme is debited against this area, the net cost per square yard works out at Rs. 10·19. The whole of this area, however, will not be available for sale or lease to the public. A considerable portion must be reserved for Government buildings, but I am to say that there is no present intention of reserving any portion of this area for a new Government House as was originally suggested. How much will be so reserved cannot be stated at this stage, but assuming, for the sake of argument, that as much as one-half of the area available for building will be required for Government purposes, which is of course an extremely outside figure, the net cost of the whole scheme per square yard of the area available for sale or lease to the public works out at Rs. 20·38 only. If interest charges are included this figure might be raised however to Rs. 30."

According to these calculations and the provision of interest the Government of Bombay evidently expected to dispose of the area of 22 lakhs square yards in 7 years, that is to say, over 300,000 square yards a year. When the question was discussed the estimates were put up in the first instance by the Department on the basis of 11-year period of disposal, that is to say, 200,000 square yards a year. This anticipation is absurd and even my colleagues in their report mention it only to reject it. The next basis of calculation is 15 years disposal at 150,000 square yards. This also is rejected by the majority report of the Sub-Committee in the words, "a result which we believe to be very doubtful of realisation".

Directed by Sir Lawless Hepper, my colleagues in the Sub-Committee have taken a period of 22 years for disposal of land giving the area disposed at 100,000 square yards per year (Statement III). I have to point out that the area of the entire Cuffe Parade reclaimed by the Bombay Improvement Trust is only 90,000 square yards. The figure of receipts anticipated at Rs. 50 per square yard would leave a net loss to the Department according to statement on next page of over Rs. 40 per square yard, or Rs. 40 lakhs a year. The outlay on buildings and land together, which is calculated on this basis, is about Rs. 3 crores a year for the next 22 years. To expect this to happen would be more like the forlorn hope of a gambler who has lost than a reasonable business anticipation.

The Committee appointed in 1912, which under Government inspiration threw in their weight of opinion in favour of the reclamation, were of opinion that the land, which could be disposed of on the Back Bay Reclamation, would be an area of 60,000 square yards *including all the requirements of Government and public bodies.*

Sir Henry Proctor, one of the members of that Committee for whose judgment considerable respect is felt in Bombay, even then thought that Rs. 25 was a rather heavy figure and would not attract the necessary capital:—

"I do not myself consider that the scheme quite fulfils the object aimed at, which is, I understand, to provide housing accommodation at reasonable rents. It is perhaps true that Rs. 25 a square yard is a reasonable rate for land in Bombay, situated as the proposed reclamation will be; but it appears to me that if this is to be the price of the land, then it will only furnish accommodation for wealthy people or result in the erection of flats. It is true that it is much about the rate charged by the Improvement Trust and Port Trust for sites on the Marine Lines, Wellington Lines and Apollo Bunder, but the effect of that rate in those instances was the erection of flats which, in my opinion, are most unsuitable for this country and, except in certain back plots should not be encouraged on the reclamation. The results foreshadowed in Messrs. Lowther, Kidd and Company's report, *viz.*, 'a decided abatement of the excessive cost of housing and the substitution of a type of house better adapted to conditions of living in a tropical climate' are hardly likely to be obtained unless there are a good proportion of sites available at considerably below that figure."

My colleagues in the Committee in the partial scheme, which they are putting up, have ultimately fixed the area to be disposed of every year, at 60,000 square yards a year as an outside limit of optimism and 20,000 square yards a year as a conservative estimate. Assuming that the cost of the scheme is according to the latest estimate Rs. 1,100 lakhs, the prices, which would have to be recovered, will vary according to the area disposed of every year as indicated in the following table supplied by the Department.

Note showing the average rate per square yard which would have to be obtained to liquidate the debt incurred on the Back Bay Scheme up to the date of completion of the scheme if the disposal of the land took 10, 20, 30, 40, 50, 60 or 100 years after the whole debt is incurred calculating interest at the rates of 6 per cent. and 7 per cent. on debt incurred, and assuming that the land available for sale on completion costs Rs. 50 per square yard.

Total area available for sale being 22 lakhs square yards, the total cost on completion of the scheme at the rate of Rs. 50 per square yard would be Rs. 1,100 lakhs. The following tables show in column 7 the rates per square yard which would have to be obtained to liquidate the debt without any profit, assuming rate of interest on the debt to be 6 per cent. in the first tables and 7 per cent. in the second :—

Period of Disposal. Years.	Re. 1 at end of period at 6 per cent.	Rs. 1,100 lakhs at end of period at 6 per cent.	Amount that annuity of Re. 1 will produce at end of period at 6 per cent.	Annuity to extinguish debt in col. 3 at end of period at 6 per cent. Divide 3 by 4.	Area of land to be sold per annum.	Lowest selling rate per square yard. Divide 5 by 6.
1	2	3	4	5	6	7
	Rs.	Rs. lakhs.	Rs.	Rs. lakhs.	Sq. yards.	Rs.
10	1·79085	1,969·93500	13·18079	149·45	2,20,000	67·93
20	3·20714	3,527·85400	36·78559	95·90	1,10,000	87·18
30	5·74349	6,317·83900	79·05819	79·91	73,333	108·96
40	10·28572	11,314·29200	154·76197	73·10	55,000	132·90
50	18·42015	20,262·16500	290·33590	69·78	44,000	158·58
60	32·98769	36,286·45900	533·12818	68·06	36,666	185·62
100	339·30208	3,73,232·28800	5,638·36806	66·19	22,000	300·86

Period of Disposal. Years.	Re. 1 at end of period at 7 per cent.	Rs. 1,100 lakhs at end of period at 7 per cent.	Amount that annuity of Re. 1 will produce at end of period at 7 per cent.	Annuity to extinguish debt in col. 3 at end of period at 7 per cent. Divide 3 by 4.	Area of land to be sold per annum.	Lowest selling rate per square yard. Divide 5 by 6.
1	2	3	4	5	6	7
	Rs.	Rs. lakhs.	Rs.	Rs. lakhs.	Sq. yards.	Rs.
10	1·96715	2,163·86500	13·81645	156·61	2,20,000	71·22
20	3·86968	4,256·64800	40·99549	103·83	1,10,000	94·40
30	7·61226	8,373·48600	94·46079	88·64	73,333	121·00
40	14·97446	16,471·90600	199·63511	82·51	55,000	150·00
50	29·45703	32,402·73300	406·52893	79·70	44,000	181·14
60	57·94644	63,741·08400	813·52038	78·35	36,666	213·68
100	867·71623	9,54,487·85300	12,381·66179	77·09	22,000	350·40

It will be seen that this note supplied by the Department speaks of "*assuming* that the land available for sale on completion costs Rs. 50 per square yard" and also "the total cost of completion of the scheme at the rate of Rs. 50 per square yard *would be* Rs. 1,100 lakhs". On account of the way in which the position was presented, I have found it very difficult to get hold of this elusive factor of interest, for which no provision appears to have been made in departmental

forecasts. The project estimate, of the Chief Engineer, the last of which gives the figure of Rs. 1,100 lakhs, is as will be seen below without the calculation of interest during the period of construction :—

Item.	Figures in lakhs of rupees.			
	Sir George Buchanan's estimate.	Estimate sanctioned by Government.	Item.	Revised Estimate of Chief Engineer.
Sea wall ..	118·11	235·21	Works other than filling.	600·60
			Dredged filling ..	250·78
Reclamation ..	166·52	251·34	Dry filling (including Murum Topping).	158·24
			Renewal of Dredger Pipe Line.	13·50
Roads and drains ..	75·00	211·91		
			Additional rolling stock and sidings.	11·20
Establishments and consultants' fees ..	17·98*	66·67†	Establishment ..	72·10
Unforeseen charges ..	nil	10·00	Unforeseen charges ..	20·00
	377·61	775·13		1,126·42
Deduct amount estimated to be realised by sales of plant ..	10·00	67·00		nil
Deduct credit for plant to be loaned to East Colaba Scheme ..	nil	5·70		nil
	367·61	702·43		1,126·42

* This includes establishment charges at 5 per cent. of cost of works.
† This includes establishment charges at 7½ per cent. of cost of works.

63. To take these actual costs under the various headings without any provision for interest may be convenient for certain departmental purposes. But it gives an absolutely wrong notion to the public that the land will cost Rs. 50 per square yard. The only proper basis, on which the cost of the land without any reference to receipts can be calculated, is as follows :

Statement showing the total expenditure to be incurred on the completion of the Back Bay Reclamation Scheme if dry filling of two trains a day is used up to completion of blocks 1 and 2 and thereafter dredging and topping only and the interest charges payable thereon till completion—

(*Note.*—Interest is taken here at six per cent. merely because majority sub-committee reckon at six but really it should be seven per cent.)

	Figures in Rs. lakhs.
Debt incurred in connection with Back Bay Reclamation up to 1st October 1925	533·67
Expenditure from 1st October 1925 to 31st March 1926 ..	22·28
Interest on this at 1½ per cent.	·22
Total to end of 1925-26 ..	556·17

		Figures in Rs. lakhs.
1926–27	Interest on this at 6 per cent.	33·37
	Expenditure	32·73
	Interest on this (32·73) at 3 per cent.	·98
	Total to end of 1926-27 ..	623·25
1927–28	Interest on this at 6 per cent.	37·40
	Expenditure	35·24
	Interest on this (35·24) at 3 per cent.	1·06
	Total to end of 1927-28 ..	696·95
1928–29	Interest on this at 6 per cent.	41·82
	Expenditure	35·34
	Interest on 35·34 at 3 per cent.	1·06
	Total to end of 1928-29 ..	775·17
1929–30	Interest on this at 6 per cent.	46·51
	Expenditure	32·83
	Interest on 32·83 at 3 per cent.	·98
	Total to end of 1929-30 ..	855·49
1930–31	Interest on this at 6 per cent.	51·33
	Expenditure	33·38
	Interest on 33·38 at 3 per cent.	1·00
	Total to end of 1930-31 ..	941·20
1931–32	Interest on this at 6 per cent.	56·47
	Expenditure	40·83
	Interest on 40·83 at 3 per cent.	1·22
	Total to end of 1931-32 ..	1,039·72
1932–33	Interest on this at 6 per cent.	62·38
	Expenditure	26·56
	Interest on 26·56 at 3 per cent.	·80
	Total to end of 1932-33 ..	1,129·46
1933–34	Interest on this at 6 per cent.	67·77
	Expenditure	29·48
	Interest on 29·48 at 3 per cent.	·87
	Total to end of 1933-34 ..	1,227·58
1934–35	Interest on this at 6 per cent.	73·65
	Expenditure	26·06
	Interest on 26·06 at 3 per cent.	·78
	Total to end of 1934-35 ..	1,328·07
1935-36	Interest on this at 6 per cent.	79·68
	Expenditure	34·01
	Interest on 34·01 at 3 per cent.	1·02
	Total to end of 1935-36 ..	1,442·78

		Figures in Rs. lakhs.
1936–37	Interest on this at 6 per cent.	86·57
	Expenditure	29·93
	Interest on 29·93 at 3 per cent.	·90
	Total to end of 1936-37 ..	1,560·18
1937–38	Interest on this at 6 per cent.	93·61
	Expenditure	26·85
	Interest on 26·85 at 3 per cent.	·80
	Total to end of 1937-38 ..	1,681·44
1938–39	Interest on this at 6 per cent.	100·89
	Expenditure	43·57
	Interest on 43·57 at 3 per cent.	1·31
	Total to end of 1938-39 ..	1,827·21
1939–40	Interest on this at 6 per cent.	109·63
	Expenditure	25·55
	Interest on 25·55 at 3 per cent.	·77
	Total to end of 1939-40 ..	1,963·16
1940–41	Interest on this at 6 per cent.	117·79
	Expenditure	25·55
	Interest on 25·55 at 3 per cent.	·77
	Total to end of 1940-41 ..	2,107·27
1941–42	Interest on this at 6 per cent.	126·44
	Expenditure	25·55
	Interest on 25·55 at 3 per cent.	·77
	Total to end of 1941-42 ..	2,260·03
1942–43	Interest on this at 6 per cent.	135·60
	Expenditure	8·22
	Interest on 8·22 at 3 per cent.	·25
	Total to end of 1942-43 ..	2,404·10
1943–44	Interest on this at 6 per cent.	144·25
	Expenditure	10·09
	Interest on 10·09 at 3 per cent.	·30
	Total to end of 1943-44 ..	2,558·74

I want to contrast this with the latest statement, for which the Department made it responsible on the 15th of September 1924 :—

" The maximum outlay including interest is estimated at Rs. 12 crores and the receipts at Rs. 16½ crores approximately.

" On a more pessimistic assumption that no sales take place till 1931-32 the profits are reduced to 2-1/4 crores, the maximum outlay including interest being Rs. 14-3/4 crores and the receipts 17 crores approximately.

" The probable date of completion of the whole scheme is 1931, and it should be possible to put land on the market before that date."

(Report on Back Bay Reclamation prepared by the Department for the benefit of the Advisory Committee.)

65. The loadstar of all the hopes of the Department seems to be the receipts from the sale of land to the military. This is put down in the latest departmental return at Rs. 239 lakhs to be received in the year 1931-32. If this receipt is calculated down to the date of the completion of the scheme, it will reduce from Rs. 2,558·74 lakhs a sum of Rs. 507·50 lakhs. This leaves the balance as the cost of the reclamation scheme, which will yield 22 lakhs square yards of building area and *therefore gives the cost per square yard of over Rs.* **93.** It is necessary to contrast this with the statement, which the Department made in a note before the Advisory Committee as late as 17th February 1925, in which they say :—

" The actual cost (including interest) per square yard of net developed building area will be in the neighbourhood of Rs. 30 at the time when it is expected that land will begin to be available for sale to the public."

While I have every desire to refrain from attributing motives of deliberation to any one, I must record in public interest that it is very wrong for the Department to talk of land costing Rs. 50 and much more so of land being sold at Rs. 50. The cost of the land has been clearly demonstrated according to the practice of costing in all business concerns to be Rs. 93.

66. All statements indicating the amount, which would have to be recovered per square yard on the basis of a total recovery of Rs. 1,100 lakhs, prepared by the Department and given by me on page 22, become not only valueless, but positively mischievous in the sense that they conceal the probability of financial loss of great magnitude.

67. On any calculation that can be put forward the loss is likely, therefore, if the Government of Bombay persists in carrying on the project, to run into anything from rupees 50 to 200 crores. In mentioning these figures I have carefully in mind the fact that in very early stages of the prosecution of the programme the physical impossibility to carry on would be met with through financial stringency, which even a great Government can feel. The decision, however, whether to carry on or not rests with Government and a committee can only make the mechanical calculation of the figures of loss, even if they sound as incomprehensible as the figure of Rs. 50 crores given by Government as the profit from the scheme. Under the circumstances, since it will be found in very early stages of this enterprise impossible to carry on through financial straits, it would be the better part of wisdom to decide here and now for a complete stoppage and a finale to this drama of financial extravagance. The problems of best realisations from the debris left over could not be dealt with properly in an atmosphere of controversy before the Government's final decision is announced.

68. *I have, therefore, after a long and anxious consideration come to the conclusion that the work of reclamation on the Back Bay should be stopped.* Many programmes by private individuals and corporations initiated during the period after 1918 have already been stopped through liquidation. The Back Bay Reclamation itself might have been undertaken by a commercial syndicate but for the erroneous estimates made by Sir George Lloyd, who wanted to retain for the public treasury the gains which were then supposed to arise from these operations. If a public commercial syndicate had undertaken the operations, it would have gone into liquidation long ago. The increase in estimates from 3·67 to 7·02 crores in the first instance and to 11·48 crores at the present moment with possibility of further rise would have left such a syndicate depleted of finance and incapable of carrying on. In any case the deterioration in values of land and the almost total disappearance of the demand for land for the time being would have suggested a revision of programme at a much earlier date and the total stoppage of work.

69. By a total stoppage of work, which could have been undertaken one season earlier in response to popular demand, an outlay of about half a crore which was incurred during the last year would have been saved. At the present moment the amount of debt outstanding is Rs. 533 lakhs. The realisations from the sale of plant, etc., would be Rs. 45 lakhs. A total net loss of Rs. 488 lakhs, or Rs. 29·28 lakhs per year has therefore to be faced, if a larger loss has to be avoided. As usual, the machinery of Government when once started cannot stop and an attempt is being made to carry on, but it will involve a much greater loss on the province and will mortgage the entire future of the province. What have the ryots of Sind and Karnatak, Gujerat and Maharashtra done that they should be

saddled deliberately and through financial error with so large an annual charge ? The Government of Bombay have turned down schemes of education and sanitation in so many directions for lack of funds. How can they countenance possible increase of these charges by completing this scheme ?

70. Another factor inducing me to come to the conclusion for total stoppage is that the bureaucracy, which has been set up in a separate Department for development purposes, would then have no business to continue. This hierarchy of officials is not only costly but has evolved a tradition for misleading the public as to the objects and purposes of their activities and as to the exact financial obligations, which some of their activities are going to throw on the heads of the taxpayer. The cost of this Department in the development headquarters alone every year is Rs. 2,25,000. The subordinate staff at the secretariat gets out of this only Rs. 72,000. The balance therefore goes to support a few high-placed officials. The necessity for continuing these offices would disappear, the moment final decision is reached that the Back Bay Reclamation should be stopped. On the issue of the development chawls, Government have already decided not to build any further and the mere administration of the chawls should in due course be handed over either to the Improvement Trust for management, or the option, which was contemplated at the time of the inauguration of the housing scheme, should be offered to the Bombay Municipality to take over these " workmen's palaces ". On the question of suburban development, the third main branch of the activity of the Department, Mr. Cowasji Jehangir, the member in charge of this Department, said very definitely on behalf of Government in the debate on 10th March 1924 that :—

" As to the development in the suburbs the policy of Government is one of considerable caution. They do not propose to further develop any of the residential or industrial schemes unless there happens to be a demand for land in any one of the schemes. *If there happens to be no demand, Government do not intend in the coming year to spend any money on these residential and industrial schemes.*"

I consider that the cheapest method of administering the residual of the activities of the Department would be to utilise the Public Works Department of Bombay, the Collector of Bombay and the Collector of Salsette to look after various schemes falling naturally within their purview. That the work will not be extensive can be seen from the notes, which have been prepared by the Department for the Committee and only complete stoppage will provide the necessary ground for raising the issue of the abolition of this Department. I repeat that the abolition is called for in the interests of economy of public funds as well as to put an end to the vicious tradition of optimistic views involving Government further into speculative ventures that have already led to such serious losses.

71. It was suggested in the course of the Sub-Committee's enquiry that an attempt should be made to reduce the loss as much as possible and alternative (II) of carrying on for the next four or five years was justified on this score. This justification does not arise at all, because as against the total loss of Rs. 488 lakhs, the Government of Bombay will still go on holding as a perpetual asset, the sea wall. In a discussion with the Chief Engineer and the Assistant Engineer, I was assured that the sea wall was as permanent as any hill that was made by nature. Should prosperity come to the city and the demand for land increase in future, it may be possible for some syndicate to approach the Government of Bombay for the privilege of doing reclamation on their own account and risk on payment of so much royalty. When this occasion will come no one can say. Nor is it easy to predict what the amount of recovery under this head might be, but a total stoppage alone will bring more life into the seriously depleted property values of the city as a whole and might at some very distant time render scheme of reclamation again a practical proposition. To my mind alternative (II) indicates pure opportunism and involves some obscuring of the various issues which must be considered in connection with this scheme. It does not pointedly reveal for the time being a loss, which the Government must definitely realise and write down in their books as from to-day. It leaves uncertain the question of the completion of the scheme, which from every computation is fraught with the greatest danger of a very much bigger loss. Its only recommendation would be that it would keep in employment a certain number of men engaged on the operation. In a proper estimate of the whole

situation, this purely humane consideration is not balanced by sufficient financial security and ought not, therefore, to weigh with the authorities.

72. Another question to consider is whether Government and public bodies are prepared in their present condition of financial straits to put the necessary money for buildings, which they conceived as desirable in their extravagant mood :—

" One hundred acres of the reclaimed land are reserved for Government and municipal buildings, 27 acres for educational and 18 acres for hospital purposes."

I do not know whether Government have any estimates of the total cost of these proposed buildings. But their cost can hardly be assumed to be less than Rs. 2 crores, if the same ideas dominate the capital of the Bombay Presidency as have dominated the builders of New Delhi. A complete stoppage of the Back Bay will put an end at all events for many years to come to this extravaganzia.

Rate of Interest.

73. In the calculations, which have been put up from time to time, I find it very curious that the rate of interest, which has been throughout maintained at 7 per cent., has been suddenly altered to 6 per cent. in the final estimates put up before the Sub-Committee. The departmental report for the year ending 31st March 1922, speaks in connection with the East Colaba Reclamation " including interest throughout at 7 per cent.". A note prepared by Sir Lawless Hepper on the 27th January 1925 also calculates the rate of interest at 7 per cent. throughout the period of the disposal of the reclaimed land. At 7 per cent. the cost per square yard, at which land should be sold in order to recoup the entire outlay, would increase considerably. To my mind 7 per cent. is a safer figure to take, because as the facts about the development activities of the Government of Bombay get more and more known, the Government of India are not likely to allow the Government of Bombay to take money borrowed on their larger credit, and should the Government of Bombay ever go into the market on their own, I have no hesitation in saying that they would not be able to borrow at less than 7 per cent. as soon as it is realised that they are indulging in operations, which might involve losses running into several crores of rupees and might effectively tie down the more assured sources of their revenue. If the schemes of reclamation are continued the credit of the Government of Bombay appears to be doomed.

74. In reaching final decision on this subject a very close thought must be given to the financial effect of total stoppage or of a continuation. Bombay has, hitherto, held a reputation as the wealthiest Province in India but events of the last three or four years indicate that Bombay has been losing ground more rapidly than any other part of the country. People are only just beginning to realise how the diversion of money from trade and industry into dry, and as it now turns out, unproductive channels of Government finance has hit the prosperity of the City.

I cannot illustrate this better than by quoting Sir Maneckji Dadabhoy on the subject. Dealing with the question of public debt in the Council of State in the year 1924, Sir Maneckji Dadabhoy said :—

" I must respectfully point out that it was a great blunder committed by Government when they floated the sterling loan last year in England at 7 per cent. and when they permitted the Bombay Government to float the development loan at 6½ per cent. What was the result ? It temporarily ruined Bombay because merchants and other people withdrew all their money from the joint stock companies and banks where it was deposited and invested and employed it in the purchase of the 6½ per cent. development loan, with the result that there was no money left at a very critical time for the purpose of carrying on the trade of Bombay, and that fact accompanied partly by the Reverse Councils which were then in vogue, accounted for the partial ruination of the industrial activity of Bombay."

Sir George Curtis in his budget statement before the Council in Bombay for 1921-22, reviewing the new features of financial administration under the reform, said :—

" An important feature of the new arrangements is that permission has now been granted to local Government to raise loans, on the security of revenue allotted to them, to meet capital expenditure on works of lasting public utility, where the cost is so large that it cannot reasonably be met from current revenues or where the project is likely to prove of a remunerative character. "

75. Perhaps it is not realised by the layman that the Government of Bombay have gone headlong in their borrowing programme under the heading of development. The following figures will indicate the position :—

	Crores. Rs.
Debt outstanding on 1st April 1924 under Development ..	27·21
Estimated borrowing during 1924-25	5·35
Proposed to be borrowed during 1925-26	5·50
Total ..	38·06
Annual charges without including sinking fund Rs. Crores ..	2·16

(Budget of the Government of Bombay for 1925-26.)

Borrowings of the Development Department as such have been as follows :—

Up to end of 1921–22	397·43 lakhs.
1922–23	285
1923–24	279·50
1924–25	230
1925–26	200
	13,91·93 lakhs.

(Letter from R. D. Bell, Esq., dated 10th January 1925.)

The expenditure of Back Bay Reclamation has been indicated by Sir Lawless Hepper as follows :—

Years.	Expenditure.	Remarks.
	Rs.	
1920-21	42,47,615	Actual.
1921-22	1,52,38,862	Do.
1922-23	79,38,872	Do.
1923-24	80,73,005	Do.
1924-25	76,38,113	Revised.
1925-26	66,00,000	Budget.
Total ..	4,97,36,467	(the latest actual figure is Rs. 533·67 lakhs.)

It will be seen from this as well as from the financial position of the Back Bay Reclamation Scheme that borrowing has gone on recklessly in the belief that projects were remunerative. To my mind, the need has arisen of a very careful examination of this entire outlay running into about Rs. 40 crores, spent on the city of Bombay and the bulk of it likely to involve burden on the head of the taxpayer of the province. In any case, for any request for further loans under the head of development, a stronger justification must be forthcoming in future than hitherto.

76. It must be remembered that the borrowing power of the Government of Bombay and their credit depends ultimately on their resources. These resources in the nature of their income are not likely to increase until the Meston Settlement is revised in their favour and there does not appear to be any reasonable chance of this to happen for many years to come. It would be beside my purpose to deal with the finances of the province generally, but it is safe to assume that with the pressure of public opinion, it will be impossible for Government to keep up the excise revenue at the figures at which it is to-day, and new taxation would become necessary in increasing measure to meet the hiatus of interest from the development operations, which have proved a dead loss on the whole, not only in the Back Bay Reclamation but in most of the other schemes.

77. The industry and trade of Bombay, which is at present depressed, and the population of the city of every class, which is going through the distress of unemployment, can claim that, other things being equal, the Government of Bombay should assist them. The most direct method of assistance that the Government can adopt is to stop making further claims on available funds from public saving and to allow these funds to support the fabric of trade and industry.

The proper way to look at the programme of completion of the scheme is to indicate that before completion a sum of Rs. 20·25 crores would have to be found for actual construction expenses and interest. How this amount has been reached on a conservative calculation is already indicated in the statement on page 25.

78. The sums required are likely to be substantially increased, if the estimates again go wrong, and estimates, which have been revised half a dozen times in the upward direction, might fail before the period of completion now put at 1943-44 instead of 1926-27 originally. No representative of the taxpayer can, therefore, contemplate lightly the loss that would be involved to public finances, if anything were again to go wrong. Rs. 20·25 crores have got to be found in the first instance on the expectation that buyers will come along to recoup Government for this outlay. This would be, therefore, a very highly speculative undertaking and should anything happen to retard the advent of purchasers due to any accident in the political, administrative or business life of the city, a very large sum, which would be still larger by loss of interest through the delay, would be jeopardised. On the other hand an immediate stoppage would not lead to any further outlay of Government funds and would thus release Government resources for other and perhaps more useful purposes. It would further have the effect of bringing into the hands of the Government realisations for the assets at Rs. 45 lakhs within a reasonable time required for liquidation.

79. Apart from this, the fact that one of the principal causes of increased estimates is the low output of the dredger " Sir George Lloyd ", should have induced the Government of Bombay to take up this issue at law with the manufacturers of this plant. The efforts made by the Government of Bombay to safeguard their interests in this direction have been nil for a long time and even to-day they must be regarded as extremely feeble. An immediate stoppage alone would bring this issue to a head and involve some recovery. Assuming that this recovery is only 25 per cent. of the value, that will mean about Rs. 25 lakhs as against a fraction of Rs. 10 lakhs, which has been put down as total value of all dredging plant and piping.

80. Another factor to consider in the matter of complete stoppage is the saving of outlay on railways, transport facilities and terminals. Wild schemes of reclamation and the dream of a new city gave rise to a programme of over-head railways or underground electric, the cost of which staggered even the extravagant progenitors of the Development programme under Sir George Lloyd. In the report of the Development Department ending March 1922, we read :—

" The construction of a system of underground railways in Bombay can hardly be considered to be a question of practical politics at present, looking to the large financial liabilities already incurred on schemes of development. "

Further, it was stated by Mr. St. Nihal Singh in his pamphlet on " Development of Bombay " as follows :—

" Sooner or later there will undoubtedly have to be a circular system of underground railways in Bombay, connecting up the main railway long distance termini and the principal parts of the city, extending perhaps to the Back Bay Reclamation. The question has indeed been considered by the Advisory Committee which has expressed the opinion that such a system will eventually be necessary to serve the traffic needs of the city ; but that in view of the large financial liabilities entailed by the development schemes at present in hand, it must wait until some time in the future. "

" A portion of the railway line which at present disfigures the sea face along the full length of the Back Bay will be removed altogether, while another section (between the Churchgate and Grant Road Stations) will probably be sunk underground. "

The issue of the underground is for the moment, therefore, in suspense, but in suspense as a sword hanging on the taxpayer. This programme would be finally abandoned, the moment decision was reached that the Back Bay scheme was not to be proceeded with.

81. In the same manner the notice, which the Government of Bombay have given to the Bombay Baroda and Central Indian Railway for taking over the lines from Grant Road to Colaba, would have to be withdrawn, because if there is no land to be reclaimed on the Back Bay, then there are few public men in Bombay who would advocate discontinuance of this railway. The scheme of electrification would after a short time do away with the difficulty of smoke nuisance, if there was any, for the local traffic. The balance of advantage with reference to every class of population is in the continuance of this railway service to Colaba and, considering the altered situation in the city, if the Government were to invite the views of public bodies, I have no hesitation in saying that public bodies representing the largest number of residents of the city would emphatically ask for *status quo* so far as the Bombay Baroda and Central Indian Railway to Colaba is concerned.

82. In the same manner the question of the terminal for the Bombay Baroda and Central Indian Railway was precipitated on account of the vigorous prosecution of the reclamation scheme. Considerable outlay has been already made at Grant Road in the acquisition of land, but the additions to the Victoria Terminus with a view to cope with long distance traffic on both railways, which are computed to cost Rs. 88 to Rs. 110 lakhs, would certainly be saved. The saving under the head of terminal would be great enough to justify instant decision instead of postponement of the consideration for a few years. There is now enough land released at Colaba to enable the Bombay Baroda and Central Indian Railway to make necessary facilities for the terminal by a very small outlay. The land at Grant Road, which has been acquired, is in a very populous area, and its disposal is not likely to offer problems as serious as the disposal of any other land in the hands of public bodies in the city, even if it were pointed out that, having been acquired in the boom time, some loss would have to be written down on that land. The balance of gain under this heading would be still large enough to justify a recommendation for total stoppage.

83. The ground, on which I find the greatest reluctance to advise the continuation of the operations either towards completion or towards partial completion is the unreliability of the estimates. I have been at great pains to see whether reasonable care was taken at different stages to make careful calculations or investigation and the warnings arising from each change in the estimate were utilised for the necessary reconsideration of the whole scheme. I regret to find that the indications point absolutely to the contrary. Report after report goes on repeating *ad nauseum* notes of optimism regardless of the changed situation and a new figure was only accepted, when it was unavoidable. This attitude on the part of the Department can be understood, but its effect on the mind of any one, who looks into the accounts and the working, is of destroying the confidence for the future. Sir George Buchanan in his report, dated 11th February 1922 complained that the accounts of the Department were not kept on a proper plan and the variations in so many essential factors, every one of which affects the financial prospects of the scheme, have been so great that I cannot do better than merely summarise in a tabular form, leaving the necessary inferences to be drawn by all who might read them.

Estimates of total cost of Reclamation.

By whom put forward.	Total outlay in Rs. lakhs.	Estimated recovery of plant at end of work in Rs. lakhs.	Nett outlay in Rs. lakhs.	Date of the estimate of total outlay.
1. Sir George Buchanan in his report.	377·61	10	367·61	September 1919.
2. Government of Bombay in their letter to Government of India.	..	..	400·00	4th December 1919.
3. Sir Chimanlal Setalvad before the Bombay Legislative Council.	..	..	400·00	28th February 1921.
4. Report of the Department.	..	..	618·00*	31st March 1922.

* This is to include interest. See quotation from official report on page 33. (Report of Development Department.)

By whom put forward.	Total outlay in Rs. lakhs.	Estimated recovery of plant at end of work in Rs. lakhs.	Nett outlay in Rs. lakhs.	Date of the estimate of total outlay.
4. Sir George Buchanan in his report.	668·89	70	598·89	11th February 1922.
5. Sanctioned project estimate by the Government of Bombay.	775·13	67·67 (5·70 from East Colaba Reclamation).	702·43	October 1922.
6. Mr. Lewis, Chief Engineer, Reclamation, in his report to Sir George Buchanan.	..	..	726·54	July 1924.
7. Chief Engineer's estimate put in *ad interim* report by the Director of Development.	..	57	..	17th February 1925.
8. Chief Engineer, Reclamation, according to departmental note put before the Sub-Committee.	..	..	712·79	January 1925.
9. Sir Lawless Hepper in his departmental note.	..	..	880·00	27th January 1925.
10. Estimated by Chief Engineer for recovery in case of immediate total stoppage.	..	45	..	
11. Estimated recovery after six years work in partial completion.	..	35	..	
12. Chief Engineer in his note to the Sub-Committee.	978·51	..	978·51	Latest.
13. Do. ..	1,103·78	..	1,103·78	,,

As against this figure, the statement on page 25 shows Rs. 2,558·74 lakhs including interest.

Cost of Dredging per cubic yard.

By whom put forward.	Estimate.	Date.
1. Sir George Buchanan's report	As. 5	September 1919.
2. Chief Engineer's report	As. 19	January 1925.

Area to be disposed of and the number of years for the disposal of 22 lakhs square yards.

By whom put forward.	No. of years.	No. of Sq. Yds.	Date.
1. Government of Bombay in their letter to Government of India.	7 years	314,286	4th December 1919.
2. Sir Lawless Hepper in draft report.	22 ,,	100,000	September 1924.
3. Sir Lawless Hepper in Departmental note.	30 ,,	73,000	27th January 1925.
4. Sub-Committee written under the guidance of Sir Lawless Hepper.	35 ,,	60,000	1st October 1925.
5. Alternative suggestion of the Sub-Committee.	110 ,,	20,000	1st October 1925.

Estimated Profits of the Back Bay Reclamation.

By whom put forward.	Amount.	Date.
	Rs.	
1. Sir Chimanlal Setalvad in the Bombay Legislative Council.	*Plus* 50 crores *Plus* " at least 30 " crores	28th February 1921.
2. Sir George Curtis before the Royal Society of Arts.	" extremely profitable " ..	15th July 1921.
3. Sir George Buchanan in the propaganda pamphlet (price 2d.)	" On a very conservative estimate of land values it is confidently expected that there will be a handsome surplus from sales. "	
4. Sir George Lloyd before the Indian Merchants' Chamber.	" a far safer piece of business than many of the solid business that are undertaken in Bombay City. "	9th August 1921.
5. Sir Lawless Hepper, departmental note for the Advisory Committee.	*Plus* 4¼ crores ..	17th September 1924.
6. Sir Lawless Hepper in Departmental note.	*Plus* 2 crores ..	27th January 1925.
7. Majority Sub-Committee including Sir Lawless Hepper	*minus* Rs. 3 crores ..	1st October 1925.
8. Majority Sub-Committee led by Sir Lawless Hepper.	*minus* Rs. 5·66 crores (as on 1st October 1925).	1st October 1925.
9. According to do. ..	*minus* Rs. 19·488 crores ..	1st October 1925.
10. Calculations of the Sub-Committee headed by Sir Lawless Hepper indicating loss as on date of closing the books.	*minus* Rs. 181·33 crores ..	1st October 1925.

84. In reaching the conclusion that there should be an immediate complete stoppage, I have tried not to dwell on several aspects of the activities of the Development Department, about which the public of Bombay raised their voice from time to time. I have not referred to the falsification of the cry on which money was raised in Bombay, *viz.*, that the expenditure will be incurred " In Bombay, for Bombay and by Bombay ". I have not tried to refer to the numerous and extravagant arrangements made by the Department to boost the scheme and their activities by newspaper propaganda, by subsidising writings and spending money in other ways. The question of the employment of Indians, which the Indian Merchants' Chamber raised in the early stages, is a perpetual question in this country, but no one will say that this huge project was at any time handled by Indians in a responsible manner or that the reproach for the failure of it could be shared by Indians. Nor is it necessary for me for the purposes of this conclusion on purely financial grounds to refer to the challenge of Mr. K. F. Nariman to the Department for an open enquiry into the charges of corruption. It will be remembered that the Government have not accepted this challenge. The working of a large department takes place from the point of view of the individual citizen behind high walls and only a fraction of what is happening reaches the public. On a mere consideration of papers placed before me, it was impossible that I should tumble across any facts leading to a substantiation of the charges of misappropriation of public funds in connection with the Back Bay Scheme. But I might mention that corruption in the Development Department has been the common talk of Bombay for the last four years and it is regrettable in the light of this that Governmnent have not accepted the demand for an open enquiry.

Health of the City.

85. The process of reclamation everywhere in the past has given rise to malaria and the danger was foreseen when the development of the Back Bay

reclamation was begun. The Government appointed a sanitary committee to advise the Department as to the different steps which were necessary and I suggest that a report should be called for from this committee as to the position arising from complete stoppage and such steps in the interests of the health of the city as they advise should be forthwith undertaken.

Alternative suggested by my Colleagues.

86. These conclusions having been reached, the next problem to examine is whether any recommendation could be made to Government side by side with the recommendation that *the project as a whole having proved hopelessly out, must be abandoned.* The search should now be for reducing the liabilities and for maximum realisation of such assets as there are. My colleagues on the Sub-Committee have paid serious attention to this and have recommended that the best manner of reducing the loss is to prosecute the scheme further for four years, complete the military area and reclaim the plot opposite the Churchgate station of 360,000 sq. yards. In support of this recommendation they have put up two statements (No. I and No. II). Summarised the position is as follows :—

87. The disposal of 60,000 sq. yards (Ballard Pier being about 40,000 sq. yds.) a year from 1929-30 to 1934-35 for six years at Rs. 80 seems to me to be almost impossible. 60,000 sq. yards would give fifty plots of 1,200 yards and six flats in each of these plots would give three hundred new flats each year. The rate, at which my colleagues themselves compute the rent of these flats, is Rs. 450 a month. This is however based on the value of land at Rs. 50. Taking the value of Rs. 80, this would be increased Rs. 495 per month. The question, therefore, to ask is whether for the next few years there will be three hundred tenants ready to occupy flats on the Back Bay Reclamation at the rate of Rs. 495 per month. I have no hesitation in giving a reply in the negative. But the reply to this question will be called for not from the man in the street, but from the investor, who will have to put down his money. Any one who knows the psychology of the investor, would feel that the slightest doubt or hesitation on the prospects of letting out these flats would keep back the investor and would, therefore, prevent the sale of the land, as land is no use whatsoever by itself.

88. I propose, therefore, to examine seriously the scheme in statement 2, which puts the area disposed every year at 20,000 and puts the average price received at Rs. 60 per square yard. On this basis the number of flats added every year with a rent of Rs. 465 will be 100. This addition it is estimated to continue till the end of 1946-47. If the expectation of sales are fully realised, my colleagues estimate that compared to the cost to be incurred hereafter there will be a gain of Rs. 164·53 lakhs, which will reduce the debt from Rs. 488·67 to Rs. 324·14 lakhs. I cannot concur in this recommendation for several reasons, which I state below :—

1. In their report my colleagues put down the position as follows :—

" We therefore take the estimated liquidation value of the plant to-day as under :—

	Rs.
Dredging plant	10 lakhs.
Other plant	35 „
Total ..	45 lakhs.

" On this basis we arrive at the net liability as on 1st October 1925 as follows :—

	Rs.
Debt on 31st March 1925	493·00 lakhs.
Expenditure 1st April to 31st September .. .	25·50 „

	Rs.
Therefore debt on 1st October 1925 is Rs. 493·00 lakhs *plus* interest at 3 per cent.	507·79 lakhs.
Rs. 25·50 lakhs *plus* interest at 1½ per cent.	25·88 „
	533·67 lakhs.
Less estimated liquidation value of plant	45·00 „
Nett liability on 1st October 1925	488·67 lakhs.

Then they summarise the position with regard to the second proposition, which I am examining, as follows :—

Statement, Particulars.	Gain as on 1st October 1925.	Debt on 1st October 1925.
	Rs. (lakhs.)	Rs. (lakhs.)
Disposal of blocks I and II at average rate of Rs. 60 per square yard in 18 years at 20,000 sq. yards per annum ..	164·53	324·14

The debt as on 1st October, Rs. 324·14 lakhs, is reached as follows :—

Rs.
488·67
—164·53
324·14

It will be seen from the above that credit is taken for Rs. 45 lakhs for the value of the plant, and yet both in statement I and in statement II credit for Rs. 35 lakhs for the value of the assets is taken again. In other words if the assets are already disposed of at Rs. 45 lakhs, there will be no assets to work from and *the value of the assets has, therefore, been counted twice.* This leaves with presented debt at Rs. 533 lakhs on their own computation and without making any of the allowances for the factors mentioned below a net profit not of Rs. 164·53 lakhs, but of Rs. 164·53 *minus* 45 lakhs, *i.e.*, Rs. 119·53 lakhs. The results of the Sub-Committee's work are after many months efforts on the part of the Department to put forward the position, and *I regret to see that an error of Rs. 45 lakhs should creep in like this.* But this amount is so large that I am compelled to point it out as a ground for rejecting their conclusions.*

(2) By a partial completion, the realisation of money from the sale of assets which is now Rs. 45 lakhs, would be postponed. The present value of the realisation after the completion of the sections suggested by my colleagues is lower than what would be got by immediate stoppage, by Rs. 11,40,000, which figure must therefore be deducted from the gain, which my colleagues have tried to establish.

(3) They themselves state that in making this calculation no allowance has been made for the cost of the Marine Drive, estimated at Rs. 5·30 lakhs. The attempt to saddle the Bombay Municipality with the cost of this may or may not succeed, but the prospects of disposal are bound to be affected by the existence of this road and I, therefore, reckon that if this partial completion is accepted, the Department cannot shift the obligation to spend this Rs. 5½ lakhs.

(4) In making this calculation no provision appears to have been made for general charges, which in one of the statements put up before the Sub-Committee were put down at Rs. 50,000 a year. Nor are audit charges put in, which were indicated in one of the statements at Rs. 33,000 to Rs. 12,000 a year. These charges calculated cumulatively till the completion of the scheme would considerably reduce the estimated gain.

(5) The cost of disposal of land has been put down at half per cent. for brokerage, but I think the amount of brokerage should be increased to two per cent. There would be other charges before disposal including half the legal charges, for which no provision appears to be made.

* This error, in which the majority Sub-Committee had fallen, and which they are now acknowledging, was discovered by me after they had fixed their report, and yet Sir Lawless Hipper as Chairman of the Committee tried to insinuate that I had a motive in not disclosing this error to them. I am, therefore, compelled to publish as an appendix correspondence that took place on the subject.

(6) In the expenses calculated during the period of disposal, the item of water, lighting and drainage has not been mentioned.

For my purpose it is not necessary to calculate by how much the expected gain of Rs. 164 lakhs would be reduced but it is clear that the sum would be much inside one crore after due allowance is made for these factors.

(7) On the side of costs the Chief Engineer's estimates are the only guidance to go upon. In the first instance before these estimates are finally accepted I think they should be passed by the Consulting Engineers. In the form, in which they have been put up, I find myself most reluctant to accept them. The estimates put up by the Department have been falsified several times in the past and it is impossible to feel safe that there will not be another serious increase in cost in the next few years. Any such increase might not only wipe out the expected gain, but might actually increase the loss.

(8) The next ground for hesitation arises from the fact that out of the receipts, which are anticipated, the most important is Rs. 239 lakhs from the Military Department of the Government of India. To my mind, as representative of the tax-payer, any money spent by the Government of India, where expenditure could be avoided, is equally objectionable as money spent by the Government of Bombay.

89. According to Press Note, No. S.A.-4755, dated 9th December 1921, in which details of arrangement with the Military Department are given, it would appear that in the atmosphere in which the transaction was made, the Military Department expected to be reinstated in a very much larger area with all the building accommodation necessary for the services displaced and the Government of Bombay expected to receive not only Rs. 239 lakhs at the rate Rs. 20 a square yard, making a profit on the cost of reclaiming the land, but they also expected and stipulated for a share of the profits out of the realisations of the "valuable" military lands. The schedule of this share of profits indicates that the anticipated profit out of the sale of military lands was about Rs. 3 crores. These facts do not appear at any time to have been properly checked thereafter.

In their report of 1921-22 the Development Department states :—

"Since the agreement was made revised figures for the cost of reclamation have been prepared and the result was communicated to the Indian Merchants' Chamber and Bureau in reply to a communication by them. In accordance with these figures the total cost of the reclamation at the time of the transfer of land to the Military Department including interest will be 618 lakhs equivalent to Rs. 11 per yard, and as the figures referred are believed to be an overestimate, it is not in the least likely that Government will lose having fixed the cost price at Rs 20. *In any case Government will receive from the Military Department for the whole area about double of what the land will at the date cost them.*"

A rosy presentation of the case like this, secured for the Government of Sir George Lloyd at the time congratulations from all quarters for a very 'profitable business deal'.

90. In the course of the work of the Sub-Committee I called for figures of the cost of reclaiming the military area. Two such figures were worked out for me, one giving the cost at Rs. 19·48 per square yard and the other giving the cost at Rs. 21·20 per square yard. If I may imitate the note in the departmental report quoted above, I should say that the figures referred are believed by me to be a gross *underestimate* as no interest has been allowed for. In any case as the matter stands the Development Department will not recoup or will incur a serious loss on completing the transaction with the military.

The depreciation of property values in Bombay and the fact that land is a drug on the market and must remain so for about a generation more also wipes out the anticipated receipt from surplus profits by the Government of Bombay.

91. Turning to the same transaction from the point of view of the military, I regret that the suggestion, which I made in the course of the Sub-Committee's work for a proper valuation to be made out, as of to-day, of military lands and properties by a competent architect through the financial adviser to the military land scheme has not been carried out. I have been on the contrary provided with a note that gives me the figure of outstanding liabilities of the Military Department at Rs. 267·64 lakhs. As the military are taking land from the Development Department in an undeveloped condition, there is the entire cost of providing

roads, water, lighting and drainage on an area of about 12 lakhs square yards. There is further the cost of reinstating all the buildings for services, which were hitherto using existing properties. These details have not been supplied to me. But I have very serious doubts whether the cost of both these items could be covered by the meagre sum of Rs. 28·55 lakhs.

92. The Director of Development did not arrange for me a meeting with the financial adviser of the military lands as I desired. He has indicated in his letter, dated 10th of September 1925, that the estimated assests by the sale of lands now remaining in the military land scheme are Rs. 322·62 lakhs. As the military land in the Fort and Colaba area still available is put down at 171,427 square yards, this gives a figure in the neighbourhood of Rs. 200 a square yard, which the military expect to realise as against the figure of Rs. 50 a square yard, which my colleagues have thought fit to put down for reclaimed land for the whole scheme and of Rs. 40 per sq. yd. which the Colaba Land and Mills Co., reckons as the value of their land.

93. The next point to consider is, when these receipts will be realised. Under original scheme it was anticipted that the Military Department would have to pay down money to the Government of Bombay in February 1923. (*Vide* letter from Government of Bombay to Government of India, dated 4th December 1919). Under the new provisional scheme recommended by my colleagues the money would have to be paid down in the year 1929-30 though the departmental note submitted to the Sub-Committee mentions September 1928. Questions of interest would, therefore, naturally arise and if the receipts from sale of military lands are delayed by any cause, interest would have to be paid. Altogether the position financially from the point of view of the Military Department in the matter of this transaction has not been demonstrated to be sound.

94. In fact I have come to the conclusion that if the scheme is carried further the Military Department would have to find in the first instance at all events, new money from Government of India finance for carrying out their obligations. A recent question on this subject in the Council of State elicited the fact that the Government of India did not expect to put forward any new money towards this scheme. Whatever the prospects of the remote future may be for land in Bombay, the Military Department's lands, which are thrown in the market here and now, must bear the full brunt of the depression, and the Government of India do not appear to be wise to the situation so far, or they would have promptly demanded a cancellation of the arrangement.

95. (9) Assuming then that the estimates of my colleagues are correct and that on the score of military land contract there are no difficulties on either side, the next point to consider is that in completing the scheme, additional public funds would be called for in the first instance.

1.	Funds for completing the military area and 360,000 square yards including interest up to 1930-31	Rs. 407·26 lakhs.*
2.	From postponement of the receipts by sale of plant ..	45
3.	For military payments	239·09
	Total ..	691·35

Further interest would have to be paid on existing liability of 533·67 lakhs as on 1st October 1925 each year thereafter at 32·02 lakhs.

All these funds since the suspension in actual practice of separate borrowing on their own by the provinces must come from the common funds of the Government of India. The drafting of these is for an object, whose necessity does not appear at any time to have been clearly demonstrated. Do the Military Department in Bombay need the larger plot at Colaba ? I have not found anything in the departmental reports put up so far to indicate that the original contract was made for real military needs. I have found every indication that the original contract was made because both sides were greedy and the military thought that they were going to get a much larger plot of land and a nice slice of the profits from the sale of existing properties. It is high time, therefore, that the whole of this transaction conceived in highly speculative atmosphere is carefully looked into and rescinded, if the military need is not definitely proved. Assuming that there is going to be

* In arriving at this figure, in order to be on the safe side, I have calculated the outlay on works alone as given in Statement III, as it was never explained why the expenditure should be smaller, if the scheme is provisionally carried on for the next six years than if the scheme were to be completed.

larger convenience at Colaba, the suspension of the transaction for the next ten, twenty years and its resumption whenever reclamation is discussed in future ought to be possible.

If the military contract is rescinded, the resumption by the military of their old lands is likely to withdraw from the land market a large area, which will give a fillip to the demand for very extensive lands in the hands of public bodies like the Improvement Trust, the Port Trust and the Bombay Municipality. There should be, however, nothing to prevent the Military Department from taking over all the available land in Colaba, which is vacant, as a matter of exchange transaction on valuations fixed as between these public bodies by arbitration. The Military Department can by doing so get very extensive areas of about 250,000 square yards in fairly salutary locality and sufficiently near each other for the purposes of control.

96. (10) The department itself only a few months ago was opposed to a scheme of modifying the project by reducing the area to be reclaimed. In the interim report, dated 17th February 1925 prepared under the guidance of Sir Lawless Hepper, we read:

"As an alternative to closing down the work completely, it might be possible to modify it by reducing the area to be reclaimed either permanently or by postponing part of the reclamation to a later date. In view, however, of the heavy expenditure which has already been incurred on plant and on the sea wall which has nearly been completed to enclose the whole area, the Committee are of opinion that any such modification would have the effect of increasing the cost of the land reclaimed, and would prejudice the financial prospects of the scheme."

In addition to these, the grounds for rejecting the alternative of partial completion have been already indicated above amongst the grounds for immediate total stoppage.

97. (11) While in an immediate stoppage, there is a dead loss, the extent of which is fully known to the last penny, the danger in continuing is that the whole fabric of uncertainty would be hanging over the head of the taxpayer. Should the costs increase as they might and should the prices expected be not realised, a much greater loss would have to be faced. On the other hand while such a thing as forced liquidation is not known to Government assets, the Bombay public will remember what happened to several important markets on account of the surplus stores being dumped in, when they were no longer necessary, through a mere executive order at the top without any regard to the effect on trade or on values generally. While the taxpayer would have to bear a great loss, the owners of property in Bombay might have to face great stress through an enormous area of land being thrown on the market immediately for what it will fetch. Without doing any good to anybody, therefore, the programme of continuation conceals hidden dangers which must be avoided at all costs.

98. (12) The only method that can be recommended for the partial completion of the military land and the recovery of 360,000 square yards on the basis estimated by my colleagues so as to yield a reduction of debt by Rs. 164 lakhs, or any appreciable sum, is that the Government of Bombay, after having stopped operations on their own account, should in the first instance approach the Bombay Port Trust or the Bombay Improvement Trust and allow them to examine the estimates, on which this profit is expected. If these public bodies, whose deliberations are guided by executive boards consisting of some businessmen, are fully satisfied that there will be a surplus of Rs. 164 lakhs, then they should be allowed to take over without any charge the existing plant and to carry on the scheme on their own account and risk, subject to sharing with the Government of Bombay a portion of the surplus expected. I have very serious doubts if either of these bodies would look at the proposal even for a moment. The next method of getting the departmental estimates thoroughly checked is to invite private enterprise to take over the scheme on their own account and risk without any reference to existing debt and to work it exactly as the Development Department should have worked and to share half the profits with the Government of Bombay. The temptation of Rs. 82 lakhs profit is bound to evoke some enquiries from business firms both in India and in England, and such firms would go into this affair, only if the estimates stand close examination at their hands. The public of Bombay is entitled to ask the Government to submit their calculations in this way to an independent examination by parties, who are not likely to be drawn into the transaction unless the estimates are sound and conservative. The avoidance of the risk from the head of the

tax-payer would be well worth the profit, if any, which such an outside party would take away from these operations. In recommending this I am conscious that a fair chance should be given to the Department to vindicate its position and to reduce the very great loss, to which the taxpayer is already committed. But I have little hope that the departmental estimates would emerge out of a close enquiry by an outside business body unscathed, or that this apparent surplus of Rs. 164 lakhs will not vanish and be reduced to a negligible amount.

CONCLUSION.

Summarised my conclusions are :—

(1) The scheme was never properly considered by the Government of Bombay.

(2) The sanction of the Government of India was given in a hurry and was secured through an incomplete presentment of the entire programme.

(3) The Dredging Plant was ordered even before the scheme was sanctioned and the specification of the plant must have been faulty to give results very much lower than what was expected. After complete stoppage, enquiries should be held into the financial liabilities of the manufacturers of the plant and the responsibility of the officers involved in its ordering and purchase.

(4) Public opinion or business opinion of the city was not at all considered at any stage in the progress of the programme.

(5) Grave financial miscalculations were made both as to cost and realisations.

(6) The question of interest charges was never seriously thought of.

(7) The period of disposal and the possibility of disposal or the possible price to be realised were not considered.

(8) At a much earlier stage the scheme could have been stopped with a much smaller loss and about Rs. 2½ crores of public funds spent on the scheme could have been saved in this manner.

(9) The scheme should be immediately stopped, the establishment disbanded and the plant sold.

99. The department in their activities appear to have aimed throughout at dazzling the world by a piece of work of which Sir George Buchanan in his report (December 15th, 1924) says :

"I believe I am correct in saying that dredging operations on this scale have never been attempted either in India or elsewhere."

Sir William Sheppard presiding at Royal Society of Arts at Sir G. Curtis lecture on July 15th, 1921, said :—

"With regard to cost, there were few works in India indeed none of the precise kind described which had cost, so immense a sum as thirty millions. Even in Europe so large a scheme would be considered wonderful; he believed the renovation of Paris, to which Sir George had referred, only cost about half the proposed expenditure on Bombay."

Mr. St. Nihal Singh in his artistic booklet on Development, says :—

"The most spectacular work in which the Development Directorate is engaged is undoubtedly the stretching of the southern part of the Island to provide greater space for recreative, office and residential purposes. Additions are being made to both sides of the sea face, much larger on the west than on the east. When the work is finished the existing area of that portion of the city, roughly about two and a half square miles, will have been nearly doubled. Compared with this project, how puny look the schemes regarded as daring less than three quarters of a century ago."

* * * * * * *

"If the filling had to be brought to the site by trains carrying 1,000 tons each, at the rate of two trains a day working for 300 days out of the year, it would require 41 years to complete the operation."

* * * * * * *

"When the reorganisation contemplated under this part of the scheme has taken place, Bombay will become one of the most orderly cities in the world."

100. According to information supplied to me officially, the amount of existing land within a line drawn from the Crawford Market east and west comprising therefore the entire maidan, Fort area and Colaba, is put down at 1,450 acres. Those, who projected the reclamation of a work almost equal in extent, must have

been absolutely mad in assuming that almost a new city could be called into existence on the reclaimed land. Some of those responsible for this extravagant idea did feel the necessity for exciting the confidence of the public by asserting that the programme, though it appeared absurd, would be realised. Sir George Curtis in his lecture before the Royal Society of Arts in 1921 said :—

" It may be thought that I am drawing a fancy picture. But I am speaking of nothing which, if all goes well, is not practicable within 10 years."

To my mind the Government were gliding on a wave of prosperity but had better means than any layman of realising that conditions must change and depression must set in corresponding to the boom. In the inception, the scheme appeared certainly grand and the chorus of appreciation from every quarter must have turned the heads of the Government of Sir George Lloyd, who it must be remembered were playing with public money.

It is clear that the Government of Bombay have not enhanced their own reputation or the reputation of the Province so far, but they will make the Presidency ridiculous in the eyes of every one, if they, in the face of overwhelming facts of this kind, do not come to an immediate decision for total stoppage. I find it difficult to discover a parallel to a scheme of this magnitude, which was conceived so hastily and executed so badly. There would probably be no enterprise on record anywhere in the world that involved so great a loss to people, who through their poverty were never in a position to bear any loss and who were misguided into acquiescence to these activities through tall talk of great profits. I shall, therefore, make a free gift to Mr. P. R. Cadell of his remark as Acting Finance Member in introducing the budget on 19th February 1924 :—

" Members of this House accustomed to the achievements of joint stock enterprise in the City of Bombay in the last few years will not, I hope, fail to recognise that by comparison at least, this may be called a favourable balance sheet, and that its success is due in no small measure to the devoted efforts of the Directors and the Managing Agents, as represented by the late and present members of the Government and the officers of the Secretariat and the Heads of Departments. "

So far as the Development activities of the Government are concerned, the Directors and Managing Agents of the enterprise, if it had been a business enterprise, would certainly have been made financially answerable even under the imperfect working of Company Law at present.

I associate myself with the remarks of my colleagues regarding appreciation of the assistance rendered by the Chief Engineer and the Secretary, Mr. Gheevala.

MANU SUBEDAR.

APPENDIX I.

6th June 1925.

Sir LAWLESS HEPPER, Kt.,

Chairman of the Sub-Committee to enquire into the financial prospects of the Back Bay Reclamation,
Old Custom House, Fort, Bombay.

Dear Sir,

I acknowledge receipt of the minutes prepared by the department of the meeting of the Sub-Committee held on 4th June 1925. I invite reference to paragraph 7, which dealt with the discussion that ensued out of my letter of the 23rd May asking for certain papers. It is possible that as the discussion lasted for three quarters of an hour and as it has been summarised in the course of a paragraph, many points have not been included therein. I think, however, that it is desirable that some of the points of the discussion should be noted. In the first instance I strongly protest against the novel principle that you have enunciated that a member of a committee like the one in reference, which is practically a committee of investigation, should not be given any information unless the committee as a whole desire that such information should be placed at its disposal. I regard this as an attempt to prevent relevant facts and figures being made available in order to enable members of the Committee to come to a proper judgment. I could see considerable reluctance on your part to make available even Sir George Buchanan's report (which I have not still had) till I mentioned that I was anxious to see at what stage exactly the deficiency in the capacity of the dredger from that which was originally planned and paid for arose and when it was detected by the consulting engineers, who were earning fat fees. With regard to the papers containing the original loan and expenditure programme as fixed by the Government of Bombay and approved by the Government of India you were of opinion that it was all ancient history and would serve no useful purpose in the enquiry. You further thought that it was not relevant to the investigation which was in hand, which referred to the future rather than the past. Further between the 23rd of May and the 4th of June when the meeting was held, you were not able to secure the necessary sanction of Government, who, I presume, would not want to hold back anything from a public committee which they have themselves appointed. I pointed out that these original programmes were most relevant to the investigation, that at one time we were told that there would be a profit of fifty crores of rupees on the development project and I wanted to see at what rate it was expected to pay interest and other charges and how this or any other hypothetical figure of profit was reached. I was told that the average rate of interest, which the department was now paying, was 6·2 and that for future purposes it would be safe to assume 6 per cent. This also could not be gauged without the assistance of papers leading up to the present issue. I then requested you to write to Government if there was any departmental difficulty and to get their sanction to the papers in question being made available to me. I must further point out that the papers should be made available to me in the form in which they went to Government of India and not summaries of correspondence, which are referred to in the minutes. In conclusion I would remark that as the only non-official on this committee and representing the commercial community of Bombay and the taxpayer of the Bombay Presidency, I am entitled to every courtesy and facility at your hands, and I trust I shall be given this in future unless the Government of Bombay are so far convinced of their earlier financial errors as to seek a superficial whitewashing enquiry and a dummy report on lines fixed by the Secretariat.

I beg to remain,
Yours faithfully,

(Signed) MANU SUBEDAR.

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APPENDIX II.

EXTRACT from the Written Statement of *Cowasji Jehangir, Esq. (Jr.)*, dated November 24th, 1913, before the Claude Hill Committee on Bombay Development : —

"As to the 'provision of sites for Government Institutions, and institutions in which Government are interested', there are some sites and buildings available, in close proximity, to the present Government buildings. I believe the Secretariat is in urgent need of expansion. I would advocate the acquiring of the Taj Mahal Hotel for that purpose. With several alterations it is capable of being made into a grand Secretariat, with spacious offices and a Council Chamber worthy of this City. It ought to be able to supply all the wants of Government now and for the future. Considering what it could cost Government to build a new Secretariat with the present enhanced rates of building materials if the hotel could be acquired at cost price or under, it would be financially to the advantage of Government.

The present Secretariat should be handed over for educational purposes. This would enable the Elphinstone College to be extended and would also accommodate some other educational institution.

I would advocate the acquiring of the Wellington Mews. I consider it a great initial mistake to have allowed unsightly stables to have been built on so beautiful a site. The pulling down of the stables would of course be necessary which would entail some loss.

I would advocate the acquiring of the Watson's Hotel for educational purposes.

The Colaba Cotton Green will soon be available and even if it is intended to ear-mark it for the St. George's Hospital a considerable portion of the area could still be available for Government Institutions.

I believe that the portion of Upper Colaba which is handed over to the Military is found to be more than they require, which belief is confirmed by the many Barracks remaining untenanted throughout the year. I would suggest that an area be here set aside for the St. George's Hospital. When once the Cotton Green is removed the numbers of Cotton Godowns and all the Presses will have to follow. Thus a most valuable area will be set free over and above the Cotton Green itself. All these sites could well be used for Government and educational institutions and would be no further off from the main centre than the proposed Reclamation.

I would advocate the acquiring of the Sailors' Home which is now no longer suitable for the object for which it was built but which would be most suitable for an educational institution.

I must not be forgotten that once the Cotton Green is removed the B. B. and C. I. Railway will only have to cater for local traffic at the Colaba end, and the land which is now found necessary for their needs will be set free and can then be laid out and utilized by Government.

In my opinion the question of providing suitable areas for the better and middle classes is to a great extent tied up with the question of the Love Grove Pumping Station, which has been for years a thorn in the side of the question of the development of Bombay in this direction.

The Corporation are spending about 25 lakhs in increasing the power of the station and taking the sewage out-fall of the city to a greater distance into the sea. This in the opinion I believe of Mr. Midgly Tailor will satisfactorily mitigate the great nuisance that now undoubtedly exists. If these efforts of the Corporation are successful the whole foreshore between Mahalaxmi and Worli Fort will become an ideal residential quarter. I would here like to mention that I do not agree with the opinion so often expressed that businessmen prefer to live in the proximity of their offices. Over 50 years ago when Motor Cars were unknown the better class of merchants both Indian and European migrated from the Fort to Malabar Hill.

In these days of quick locomotion there is no reason why the Worli foreshore and hill if properly and systematically developed should not become another Malabar Hill provided the pumping station nuisance is remedied.

The Mahim woods and foreshore is another area which may well be developed as a residential quarter and it is possible if means of communication are improved that the upper middle classes may be tempted to go out to this part of the Island. This question of the developing the Mahim District has already been before the Corporation and I believe the residents would prefer the Corporation to develop it rather than the Improvement Trust as this would certainly be beneficial to their interests. But I am afraid the Corporation would not be in favour, and rightly so, of incurring so large an expenditure. I am therefore in favour of the passing of a Town Planning Act suitable to our needs and that both the Worli and Mahim Districts should be systematically developed under the operation of the new Act.

I do not believe there is such a scarcity of residential accommodation in the Fort and, its vicinity as seems to be imagined and which can be readily seen from the high percentage of flats to be found vacant throughout the year. I think it will be found that seven to nine per cent. of the flats that are kept up-to-date and in a state of good repair, are untenanted. About ten per cent. of the other flats are unlet during the sea on, and the percentage sometimes rises, I am informed, as high as twenty-five per cent. during the hot weather and monsoon.

Therefore I cannot agree that there is any great increasing demand for residential quarters even in this district. The rents may comparatively be considered high but still they are no higher than in Calcutta where there is no question of a lack of space for expansion. There may be a demand for very cheap flats in the Fort but those who cannot afford to live in a district where the price of land is high will be forced to go further afield to Mahim or even outside the Island. This is nothing unusual. It is to be found in every big city in Europe and must eventually be the same in Bombay, and would have been the same before now if a suburb had been laid out with cheap and quick means of communication with the business centre. In my opinion there are plenty of sites still available for chawls for the working classes in the district North of Jacob Circle but they should not be encouraged to be built further west than Hains Road or in the Mahim District. There is also ample accommodation for chawls on the areas developed by the Improvement Trust. The Agripada estate is a suitable locality where there is a considerable amount of vacant land. In the Parel scheme (Improvement Trust Scheme 31) the Trust have acquired an area of over 8 lakhs of square yards round and about Soparibag Road. Having regard to the fact that it is connected with a main arterial Road, a part of this locality would be admirably suited for the middle classes the other part for chawls. Lakhs of yards in the Naigaum and Dadar-Matunga District are also suitable and intended for the middle classes. I think it will be acknowledged that these districts in the Island itself will meet the growing needs of the City for a few generations to come."

* * * * *

"From the above it will be seen that I am of opinion that any reclamation scheme is at present premature. Such a scheme, if decided upon, would only provide residential quarters for the better classes. From figures already before the Public if the big scheme is carried out as proposed by Government land will cost rupees 25 a square yard. I would ask the Committee to consider what the rents for the houses would be, if the reclamation is not to become a huge flat-land. I would think they would be somewhere near rupees 300 a month. I have already mentioned above that a certain percentage of Flats in and round and about the Fort are always vacant, I therefore do not consider that there is any great demand for flats of this rent.

I am strongly of opinion that looking to the way in which investors have burnt their fingers on the Cuffe Parade, where I believe there are some plots still unlet, the public will not come forward in any numbers to build on the proposed reclamation. I admit that having an extensive park and recreation grounds is the only tempting part of the scheme. But before Government decide upon launching upon so ambitious a programme I trust they will seriously take into consideration whether the development of other parts of the Island would not suffice for our needs, for at least a couple of generations to come."

Sir Lawless Hepper in his evidence on the 27th November 1913, said :—

"*Q.*—Supposing that for Government purposes it were found necessary to reclaim any area irrespective of any particular scheme would it in your opinion afford a site for which there would be a demand by those people who would decline to go to Worli and Mahim ?

A.—I think it depends on what the reclamation would cost.

Q.—Supposing land was put at a fairly reasonable figure, would there be people to come forward and acquire land ? Would that be an attractive site for the wealthy classes ?

A.—I think perhaps it is well to say it would. But it is difficult to say exactly. It depends upon the price of land in other parts of the Island.

Q.—Do you think it might be expensive and would attract only the wealthy classes ?

A.—Yes.

Q.—You say in paragraph 8 of your written statement that so far as concerns the provision of additional areas for housing the population you would urge the reclamation of existing land and its proper drainage, together with development of Salsette, before reclamation of any large additional areas from the sea. That, I take it, has reference purely to residential requirements ?

A.—Yes.

Q.—I don't think that you object to Government reclaiming for certain Institutions within a particular area ?

A.—I was only referring to additional area for housing."

Sir Lawless Hepper in his statement dated 16th November 1913, said :—

"My view is that if a demand for increased accommodation for the housing of the better and middle classes exists to such an extent as to warrant the serious consideration of extensive reclamation in Back Bay it would be far better to spend the money in removing the Love Grove Pumping Station with a view to conveying the sewage to the north-east of the Island where, after biological treatment, the effluent could be discharged into the harbour. This would render available for residential purposes a large area in Worli and Mahim which private enterprise, controlled by a Town Planning Act might be trusted to develop, provided reasonable means of communication were afforded."

* * * * *

"Generally speaking, so far as concerns the provision of additional areas for housing the population, I would urge that the reclamation of the existing land, and its proper drainage, both as regards sewage and storm water together with the development of Salsette, should precede the reclamation of any large additional areas from the sea."

The Honourable Mr. Munmohandas Ramji in his statement dated the 7th November 1913, said :—

"I am against Reclamation."

M. M. S. Gubbay, Esq., I.C.S., in his written statement dated the 5th November 1913, said :—

"In so far therefore as the decision in favour of the reclamation scheme involves the acceptance of the principle that the demand for accommodation near the Fort is a permanent demand; I disagree with it. On the contrary I believe that a systematic and well ordered development of the north of the Island and of Salsette must react on the demand for accommodation in the Fort."

Mr. P. R. Cadell, as Municipal Commissioner for the City of Bombay, in his statement, dated 28th October 1913, says :—

"If, however, reclamation is determined on I think it should be in considerable portions. To reclaim any small exclusive areas of land appears to me to be much more expensive, and to be much liable to be dangerous to health since, since there would be constant disturbances in the areas adjoining the most recent reclamation. I would, however, venture to suggest that the figures so far published as regards the cost of reclamation should be further examined. So far as I can judge they appear to depend too largely on the estimates of one man."

Mr. J. F. Watson, Engineer, City Improvement Trust, in his oral examination on 5th December 1913, says :—

"*Q.*—You say that reclamation would depreciate values of land belonging to the Improvement Trust ?

A.—No, I don't think I have put it that way. What I mean is that a reclamation would depreciate the annual return from land owned by the Improvement Trust. This is not same as depreciating the value of land. It means that the Trust would have to wait longer to get the money for their land. It would also affect the Port Trust and private owners in the same way.

Q.—In what way would it affect adversely the Improvement Trust, the Port Trust and private owners ?

A.—You have a certain supply of land to sell. If another man comes in and offers some of his land, some people will lose by reducing the amount of money you can possibly get."

Mr. H. P. Mody in his letter to the Special Officer and Secretary to the Committee on the Development of Bombay, dated 27th November 1913, says :—

"I shall first discuss the question of reclamation, for it promises to figure largely in the deliberations of the Committee. I may state at once that *I am altogether opposed to any scheme for reclaiming the Back Bay foreshore.* Since the idea was first mooted no case has been made out for altering the natural lay-out of the city in the way in which it has been suggested to be done. For the various purposes for which reclamation is thought to be necessary, there is ample available land within the present limits of the city, which, in consequence, need no enlargement. I hope to show, in its proper place, that it is not necessary to have recourse to reclamation to provide residential areas, or recreation grounds or sites for Government institutions. Another objection to the scheme is on the score of its not being financially a sound proposition. There is reason for apprehending that the official estimates of the cost of the undertaking, and the area of land which is expected to be taken up annually by the public, are unduly optimistic and in view of the notorious uncertainty attaching to all schemes of reclamation, this aspect of the question must be carefully examined. Then again, the scheme will create an undesirable and excessive concentration in one particular quarter, dislocate all existing property values, retard the natural movement of the population towards the suburbs, and be generally in conflict with the avowed policy of the Government with regard to the development of Salsette. For these reasons, which I cannot discuss at length here, I am opposed to any scheme of reclamation, whether based on the lines laid down by Lord Sydenham's Government or on a more modest scale."

Mr. Hooseinbhoy Abdoolabhoy Lalji in his letter to the Secretary of the Development Committee, dated 29th November 1913, says :—

"I therefore simply wish to record without any comment that my views, as regards the subject matter the Committee has under its consideration and my reasons for the same will be found to be in consonance with those of the majority of the non-official witnesses, who have been examined or have submitted their views, for example I am opposed to Reclamation Scheme, and that building space and ground for all our needs and requirements of the present and of the near future could be supplied by :

(*a*) Utilising the Hornby Vellard and Mahim Woods.

(*b*) The doing of the B. B. & C. I. Railway from Grant Road to Colaba.

(*c*) By removing the Cotton Green at Colaba.

(*d*) By the removal of the present Government House at Malabar Point if desired.

(*e*) By filling up all the low-lying land in Bombay and in its vicinity.

(*f*) By acquiring under the Land Acquisition, Improvement Trust or Town Planning Acts, such other suitable lands as may be wanted or necessary."

Mr. J. F. Watson, Improvement Trust Engineer, in his written statement to the Development Committee, says :—

" The estimated financial results of the scheme are, in my opinion, far too sanguine, and cannot possibly be lived upto. The Trust has during its period of existence leased annually an average of about 50 thousand square yards, having an average value of 10 lakhs of rupees ; this includes sites for both residential and business purposes, and it is obvious that the capital invested for the latter purpose is not available for the Reclamation in Back Bay. Again the Trust figure includes a lot of very low priced lands which are bought by small investors and it need hardly be pointed out that capital from this source is not available for the Reclamation. Therefore it may safely be assumed that the leasing of 60 thousand square yards of land at Rs. 25 per square yard every year is quite outside the range of practical politics.

" It seems to me that not only would such a Reclamation as that proposed hit itself very badly financially but it would also have an adverse effect on the financial position of the Improvement Trust, and would prevent its doing as much useful work as it otherwise would ; because there must be a more or less definite average amount of capital in Bombay available annually for investment in lands.

" Supposing we assume that the amount is Rs. 50 lakhs (exclusive of the amount to be spent on buildings to make the land revenue producing). There are three parties in Bombay at present interested in supplying the land for the investment of the abovementioned capital, *viz.*, the Improvement Trust, private owners and the Port Trust ; in addition to these there is Salsette claiming a portion of the capital for its development. If now a fifth party is added claiming, say, 10 lakhs of rupees per annum (which is assuming that the reclamation is sold at the rate of 40 thousand square yards per annum instead of 60 thousand square yards), it is obvious that the other four must lose heavily and the Improvement Trust being the biggest landlord will lose most. "

Mr. (now Sir) Purshotamdas Thakurdas in his written statement, dated 11th of November 1913, said :—

(*b*) " Should the area made available as suggested above be not sufficient, I am of the opinion that recourse may be had to reclamation.

(*c*) " I am in favour of reclamation of one small section at first to be followed by additions, if reclamation be found suitable from a financial point of view, which is very much doubted at present.

" You will notice from the Indian Merchants' Chamber and Bureau's reply to (*b*) paragraph 5 that they have reason ' to apprehend that the cost of reclamation will be too expensive to make it a feasible scheme'."

Mr. (now Sir) Chunilal V. Mehta in his written statement dated 28th of November 1913, said :—

" Without wishing to suggest separate compartments for different grades of society I believe the reclamation will meet the demands of the wealthy classes and the people now residing in Fort, who will be displaced by the increasing number of offices and shops..... Reclamation would be a good investment provided the estimates of cost are maintained."

Sir D. E. Wacha in his statement dated the 19th November 1913, said :—

" And it is surprising to see the Government *now* inviting people to state what ' progress ' has been made since 1909 and what are their views as to development ! Where is the guarantee that the views they are now invited to express will be regarded ? If the public, I mean that large majority which has permanent ties and interests in the City, have on more than one occasion in the past been greatly disappointed, not to use a stronger word, and if, after making a show of public investigation, the Government has carried out its own pre-determined policy, is there any reason to doubt that the action of the Government will be different in the present instance ? "

The Honourable Mr. Phiroze C. Sethna in his statement dated the 20th November 1913, said :—

" The increase in the population of Bombay is not at so amazing a pace as to warrant the very heavy expenditure which the reclamation is bound to involve and with doubtful results as to the leasing of the plots at fairly remunerative rates. The physical configuration of Bombay is very like that of New York and the tendency in both cities is for Government and commercial offices to be congregated towards the tapering point where the islands are at their narrowest

with the result that, as more room is wanted for business centres, properties hitherto used as residences have by degrees been converted into offices. This has been our experience in the Fort, but an experience which after all has helped to remove the occupants of crowded Fort residences to the north and west of the Island where the congestion is not great and consequently the residents of the Fort who have migrated are doubtless now occupying healthier and roomier residences. If there is more space required for Government and business offices, I contend that if the area in Fort north is taken in hand, where a large number of houses are of the poorer class and very insanitary, this area when developed will easily afford that broad thoroughfare from east to west, which has been felt to be a great desideratum, and the removal of the existing poor residences will open up enough spaces in the Fort to meet for the next thirty years or more the increased requirements of Government or of the commercial community. If Bombay continues to grow at a quicker rate than what it has been doing in the last three decades it will be time a quarter century hence, and not before, to take in hand the question of the Back Bay Reclamation to supply to this City the want which Brooklyn supplies to New York and the population of New York to-day is at least $4\frac{1}{2}$ times that of Bombay."

APPENDIX III.

Correspondence regarding "error" of Rs. 45 lakhs in the Majority Sub-committee's report.

Minutes of a meeting of the Sub-Committee appointed to enquire into the financial prospects of the Back Bay Reclamation Project held on the 22nd September 1925.

Present :

Sir Lawless Hepper, Kt. (*Chairman*).
Mr. Manu Subedar.
Mr. R. H. A. Delves, F.S.I.
Mr. A. V. V. Aiyar, C.I.E.
Mr. S. P. Gheewala, M.A. (*Secretary*).

The draft report of the Sub-Committee, copies of which were circulated to the members in accordance with the concluding sentence of the minutes of the last Sub-Committee meeting held on the 7th September 1925, was discussed at this meeting, and it was accepted by all the members, except Mr. Subedar, subject to some minor alterations which the Chairman agreed to make. The Chairman undertook to have the report printed for signature. Mr. Subedar said that he would send to the Chairman his dissenting minute in about a week's time, which the Chairman undertook to append to the report. It was decided to hold the next meeting when the report would be ready for signature.

(Signed) H. A. L. HEPPER,
Chairman.

S. P. Gheewala,
Secretary to the Sub-Committee,
Development Directorate.

Minutes of the meeting of the Sub-Committee appointed to enquire into the financial prospects of the Back Bay Reclamation Project held on the 9th October 1925.

Present :

Sir Lawless Hepper, Kt. (*Chairman*).
Mr. Manu Subedar.
Mr. R. H. A. Delves, F.S.I.
Mr. A. V. V. Aiyar, C.I.E.
Mr. S. P. Gheewala, M.A. (*Secretary*).

The Chairman placed before the members of the Sub-Committee a printed copy of the majority report. It was signed by the Chairman, and Messrs. Delves and Aiyar, and by the Secretary. Mr. Subedar handed to the Chairman his dissenting report, which it was decided to get printed and to send a proof copy to Mr. Subedar for his approval.

(Signed) H. A. L. HEPPER,
Chairman.

S. P. Gheewala,
Secretary to the Sub-Committee,
Development Directorate.

No. D. C.—283.

Development Directorate.
Old Custom House Yard, Fort, Bombay.
Dated the 12th October 1925.

Memorandum,

In his minority report Mr. Subedar has drawn attention to the fact that a mistake has occurred in the statements prepared for the report, because Rs. 488·67 lakhs has been taken as the debt on 1st October 1925. This figure was arrived at by deducting the estimated liquidation value of the p'ant, Rs. 45 lakhs, from the total expenditure Rs. 533·67. The effect has been to take credit for value of plant twice over, and the figures arrived at of loss at present value are therefore Rs. 45 lakhs too low in each case.

2. Mr. Subedar has not explained why he thought it necessary to withhold his knowledge of this error from his colleagues, but in any case it would appear desirable that the statements should be corrected.

3. Corrected copies will be supplied to members as soon as possible, when a further meeting will be held to consider what, if any, change should be made in the recommendations of the majority.

(Signed) H. A. L. HEPPER,
Chairman.

To

All members of the Sub-Committee appointed to report on the financial prospects of the Back Bay Reclamation.

Copy.

Sudama House,
Ballard Pier, Bombay,
13th October 1925.

To

The Chairman of the Financial Sub-Committee,
Development Directorate,
Bombay.

Dear Sir,

I received your very urgent memorandum No. D.C.—283, dated the 12th instant.

In this connection I may say that on the 9th instant the reports of the majority Sub-Committee and my report, were duly signed and delivered. They became the property of the Special Committee before whom they should now be put. I have no desire to make any alterations in my report, except to indicate in a foot-note whatever changes the majority Sub-Committee decide to make at the stage.

You will remember that the final report as prepared by you chased me all over the country to Simla and was in my hands only half an hour before the day of the meeting. It was duly adopted by everybody except myself on that day. It was the report which appeared to me to be framed with every desire to either postpone the consideration or make the project appear less unprofitable than it is. The statement, for example, that the cost of the project will be eleven crores of rupees and the recoupment *with interest* would be made in 15 years by selling land at Rs. 80, is of this order. How was I to know what you now characterise as an error of Rs. 45 lakhs was not embodied in the report after proper consideration ? It is not an error of the typist in one place, but appears in eleven places. You will agree that it is very difficult for a non-official to penetrate official mentality. You will thus see that the mention of this Rs. 45 lakhs could only come as part of my report since this calculation had already been embodied in your official report. What is the paltry matter of Rs. 45 lakhs when I find an under-statement on the point of total cost and outlay of Rs. 14·58 crores ! !

I shall be obliged if you will send me the proofs of my report when ready, and, as desired by you, I shall put in the numbering of the paragraphs.

Yours faithfully,
(Signed) MANU SUBEDAR.

Copy.

Development Directorate,
Old Custom House Yard, Fort, Bombay,
Dated the 14th October 1925.

Memorandum,

A meeting will be held at 4-30 p.m. on Monday the 19th instant to resume consideration of the position arising out of the error brought to notice by Mr. Subedar in his minority report.

By order,
(Signed) S. P. GHEEWALA,
Secretary to the Sub-Committee,
Development Directorate.

Sudama House,
Ballard Pier, Bombay,
17th October 1925.

To

The Secretary to the Sub-Committee,
Development Directorate,
Old Custom House Yard, Fort.
Bombay.

Dear Sir,

I have read your memorandum, dated 14th instant, convening a meeting of the Sub-Committee on the 19th instant. I hold that when the reports were signed on the 9th instant the Sub-Committee ceased to exist and any proceedings of the Sub-Committee would be irregular and illegal. The only duties now remaining for you are to print the respective reports and to circulate them to the larger Committee.

With regard to the report itself I have nothing to add to my letter, dated 13th of October 1925.

Yours faithfully,
(Signed) MANU SUBEDAR.

Minutes of the meetings of the Sub-Committee appointed to enquire into the financial prospects of the Back Bay Reclamation Project held on the 13th and 19th October 1925.

Present :

Sir Lawless Hepper, Kt. (*Chairman*).
Mr. R. H. A. Delves, F.S.I.
Mr. A. V. V. Aiyar, C.I.E.
Mr. S. P. Gheewala, M.A. (*Secretary*).
Mr. R. D. Bell, C.I.E., I.C.S., Deputy Director, was also present.

The question arising out of the error brought to notice by Mr. Subedar in his dissenting report was discussed by the Sub-Committee. The Chairman read letters, dated 13th and 17th October from Mr. Subedar, in which he expressed the opinion that the majority report having been signed on the 9th instant had become the property of the Special Committee and that any further procedure in connection with the report would be irregular and illegal.

2. The members present resolved to record the opinion that the majority report would become the property of the Special Committee only when it was submitted to that Committee. In the meantime the signatories of the majority report were at perfect liberty to correct or amend their report in any way they wished. The necessity for correcting the report after it had been signed would not have arisen, had Mr. Subedar brought to the notice of his colleagues on the Sub-Committee the fact that an error had occurred in preparing the statements.

3. It was decided to make the necessary corrections in the statement as well as the consequential alterations in the report. The Committee decided that the change did not affect their conclusions or recommendations which had been arrived at the meeting held on 2nd September, before provision of credit by sale of plant had been introduced into the statements, which was subsequently done at Mr. Subedar's suggestion.

4. In view of Mr. Subedar's statement that he did not desire to make any alteration in his report, the following words should be added to the note at the foot of page 7 :—

" The error referred to by Mr. Subedar, which appeared in the first print of our report, has been corrected. Our conclusions and recommendations are not affected by this alteration."

5. Revised proofs should be sent to all members together with proof copy of Mr. Subedar's report.

S. P. GHEEWALA,
Secretary to the Sub-Committee,
Development Directorate.

(Signed) H. A. L. HEPPER,
Chairman.

APPENDIX D.

Sudama House,
Ballard Pier, Bombay,
22nd October 1925.

To

The Secretary to Government of Bombay,
Development Directorate,
Old Custom House Yard, Fort,
Bombay.

Dear Sir,

The majority and minority reports of the Financial Sub-Committee on the Back Bay Reclamation Scheme were signed on the 9th instant. The figures, which were supplied to me by the Department, from which I have reached certain conclusions, were embodied in the minority report and these conclusions make it imperative that the Government of Bombay should pass orders for nothing further to be spent on that scheme. I now understand from outside that the Chief Engineer is fixing up contracts for emptying wagons on the Back Bay for the next three years. I am also told that arrangements are being made at the date of official closing of the monsoons to start dredging for the next season. I trust there is no truth in this information, but if there is, I wish to let it go on record that as a member of the Advisory Committee I think the outlay of Rs. 22·28 lakhs for the next half-year season on the Back Bay Reclamation Scheme or any portion of it would be altogether unwarranted in view of the financial prospects of the scheme having been now disclosed as hopeless.

I am aware that the Government are responsible for the execution of this project, but I take it that it must also have been known to Government that, in spite of some delays which were avoidable, the Department have in their possession to-day facts of a startling nature, and the Government in my humble opinion should try and avoid any further outlay which will appreciably add to the loss on the project and the consequent burden on the tax-payer.

I beg to remain,
Dear Sir,
Your most obedient servant,
(Signed) MANU SUBEDAR.

BOMBAY : PRINTED AT THE GOVERNMENT CENTRAL PRESS.

BOMBAY DEVELOPMENT DIRECTORATE

REPORT

ON THE

BACK BAY RECLAMATION SCHEME

FEBRUARY, 1926

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.

CX.9.51

BOMBAY
Printed by the Government Central Press
1926

To

The Director of Development,
Bombay

Sir,

BACK BAY RECLAMATION SCHEME.

In accordance with the instructions contained in your letter dated the 11th January 1926, I have the honour to submit for your consideration my report on the Back Bay Reclamation Scheme.

2. The terms of reference contained in your instructions were :—

> "To consider and report upon the present situation of the work in connection with the Back Bay Reclamation Scheme, and, where possible, to submit for the consideration of Government any suggestions for its more efficient, expeditious and economical completion."

3. The report being desired by the middle of February 1926, I have given the subject the fullest possible consideration within the limited time at my disposal. Such documents, drawings and figures as are pertinent to the matters under consideration have been placed at my disposal; I have visited the sites of the works and quarries, have inspected the Dredgers at work and have interviewed and cross-examined those in charge of the various sections of the works and machinery. I have also seen the Chief Accountant of the Development Directorate and have generally examined the methods by which the accounts are kept and the money is paid.

4. I have read the documents and reports dealing with the past history of the Scheme and have examined the drawings and estimates for the work, past, present and future. It has not been possible on account of the restricted time available to check the quantities or to verify the prices supplied by the Engineers in detail and I have therefore assumed these as being generally correct for the purposes of my report. Where it has been possible I have compared them with prices for work in similar situations with satisfactory results.

5. The position which presents itself today is as follows :—The Consulting Engineer's original estimate for the Scheme in September 1919 was 367·61 lakhs of rupees. Work in the field was started in January 1921. Towards the end of the same year the late Chief Engineer revised this estimate and increased it to 702·43 lakhs of rupees: neither of these amounts include interest. On the same basis the present Chief Engineer now estimates that, with the present programme, about 1,100 lakhs of rupees may be taken as the approximate sum for completing the whole scheme as originally designed, exclusive of interest. The accounts show that up to the end of December 1925, 550·74 lakhs of Rupees have been spent leaving about 650 lakhs of Rupees still to be expended on engineering works alone but exclusive of interest.

6. The matter of most vital importance is that of deciding how far the work should be carried on to bring into effect the best economical and commercial situation and after due consideration, I am faced with the following conclusions :—

> (*a*) That in deciding how far the work should be carried on to arrive at the best economical and commercial situation, future expenditure only can be considered. The money expended up to the present time does not and cannot enter into the calculations.

(*b*) That provided the land reclaimed on the whole or any part of the area be let within an economical time, at a price exceeding the actual cost from now onwards with interest, the Government must be placed in a better financial position by completing the whole or part of such area than they will be in if the work is not proceeded with.

(*c*) That the results of the dredging up to the present are most unsatisfactory and although they may at times show some improvement, I am of opinion that, even though the restrictions by the Indian Marine and the Bombay Port Trust Authorities were removed, they are not ever likely to be economical. That the reason for this is the unsuitability of the dredging plant for dealing with the material as it exists both in the Harbour and in Back Bay. Although I am informed that the borings have been found substantially correct in so far as hard and soft materials are concerned, the nature of these materials is, in the main, either too hard to obtain an economical output for the dredger or too soft to provide *satisfactory filling* for the purpose of reclamation. Added to this a very large portion of the material is situated at too great a distance from the site of the Reclamation to be pumped economically with the dredging plant as specified and delivered.

(*d*) That there is however soft clay available in the harbour within working distance of the Reclamation Block No. 8, which could be pumped with the assistance of the floating shore dredging plant in sufficient quantities to complete this area. That this material, though I could not recommend it generally for the reclamation of land which it is intended to build over, would nevertheless be suitable for Block No. 8 which I understand is to be utilised for parade purposes and into which a substantial depth of hard clay has already been pumped. The dredging plant will probably sell for a better value if the dredger has proved herself by dredging in Bombay more approximately to the quantity of material for which she was designed.

(*e*) That all reasonable care and skill has been exercised by those in charge of the work to secure the best results out of the dredging plant and in addition that the working costs of the dredging plant per annum are less than the original estimates provided for. The abnormally high cost of the dredged filling has been entirely due to deficiency in output.

(*f*) That the present cost of the filling with moorum compares favourably with the dredging cost up to date. That if the quantity of moorum now being brought on to the work is increased it is reasonable to expect that the cost per unit may be reduced, as more favourable Railway rates should be obtainable. That the moorum filling is better suited for the present reclamation purposes in every respect than the dredged filling and the use of it will save considerable money when the development of the land takes place. That, unlike dredging, the rate of reclamation by moorum filling can be increased, diminished or suspended if and when necessary without substantial extra cost and as much or as little of it can be deposited as is desired at a time. From investigations I am satisfied that sufficient moorum can be economically obtained for any purposes of the reclamation.

(*g*) That apart from the dredging the works comprised in the reclamation have been designed efficiently and carried on economically and in some cases the costs have been less than the estimates. The standard of work and the rate of progress both compare favourably with those of similar works in other parts of the world. I further consider that the scale of establishment charges is a reasonable one for works of this nature.

(*h*) With regard to the sea wall I have not had an opportunity of witnessing the effect of a monsoon sea at the site but my experience would lead me to the conclusion that the design is sufficient for what may be expected when the reclamation is completed with the protection afforded by the configuration of the Bay and the position of the reefs. It is advisable to call attention to the fact that, until such time as the reclamation is eventually completed, there will always be a possibility of the sea wall being damaged

and requiring a certain amount of repairs after heavy monsoon seas. This could be minimised by the tipping of sufficient filling behind the wall after the maximum of silting referred to hereafter has taken place. The bank thus formed might be utilised for a marine drive and there are possibilities in this connection.

7. Having given due consideration to these conclusions, I have the honour to recommend the following for your consideration :—

(*a*) That the dredging operations in Back Bay shall be stopped after the close of the present dredging season and the plant in use there disposed of on the most favourable terms. I estimate an approximate value of the plant at 9·50 lakhs of Rupees though the prices will entirely depend on obtaining a market, and this is an uncertain factor.

(*b*) That as soon as the intermediate floating pumping station is repaired, which I understand will be in about a fortnight's time, the Sir George Lloyd Dredger should be moved to a point S. E. of its present position and should pump soft clay into Block No. 8. A small retaining bank of moorum should be deposited round this area of a sufficient height to allow the material to be pumped to the specified level with the necessary allowance for shrinkage. Accurate quantities required for this area are not at present available, but I am satisfied that the work can be completed by not later than the end of the next dredging season, *i.e.*, April 1927. The cost of completing this Block with the addition of the surfacing at present rates will amount approximately to 27·50 lakhs of Rupees. There is a possibility that this figure may be improved upon.

(*c*) That on the completion of Block No. 8 by pumping, the Dredger in the Harbour should be stopped forthwith and the remainder of the dredging plant should be disposed of at the best possible terms. On the same lines as before I estimate the approximate value of the plant at 14·50 lakhs of Rupees.

(*d*) That provided moorum filling can be obtained at a reasonable price, Block Nos. 1 and 2 should be reclaimed by means of this material and completed by a date which would be most likely to give an advantageous sale. At present rates this would cost approximately 45·50 lakhs of Rupees, but again I anticipate there should be a reduction in this cost.

(*e*) That the timber gantry should be continued and completed over the site of the sea wall not at present constructed, that the rubble bank should be tipped from this gantry to about half tide level and that the inside slope of this bank together with the remainder of the bank enclosing Blocks 3, 4, 5, 6 and 7 should be made watertight with moorum backing for half its height. As the site of the reclamation within the bank silts up during the monsoons the level of the stone bank and the moorum backing should be gradually raised. I have no sample of the sand and silt laden water which obtains in the Back Bay during the monsoon and am therefore unable to predict as to the amount of accretions from silting which may be expected. From a description of the water, however, this should be considerable and I recommend that samples should be taken during the next monsoon. The estimates for the cost of this item of work including the final completion of the wall will amount approximately to 20·50 lakhs of Rupees.

(*f*) That, if it is considered at a later date that all or any of Blocks Nos. 3, 4, 5, 6 and 7 can be disposed of advantageously at any time, then the reclamation above the level of the sand or silt deposited should be completed as and when required with moorum dry filling. As soon as the whole area is reclaimed the sea wall should be completed. The cost of filling this area with moorum and making no allowance for silting, at the present rates, would amount approximately to 204 lakhs of Rupees, but again this sum must be taken as an approximation only. The cost of the work would be reduced by any silting which might have been deposited before the moorum filling was commenced. Owing to the levels of the reclamation

and the height of the tides, it is not probable that the silting would amount to more than 33 per cent. of the total filling, but, if this figure was attained there would be a saving of 68 lakhs of Rupees at the rates on which these estimates are framed.

(*g*) That in the event of the suggested or any modified programme being adopted, it is essential that a revised working scheme carefully thought out and a reliable detailed estimate of the work proposed be prepared, submitted to and approved by Government at the earliest possible moment. Further that accurate progress in money diagrams should be kept throughout the construction of the work so that it may be possible at any time to see how matters stand and whether the approved programme is being worked to as regards quantities, money and time.

(*h*) If it is possible to obtain experienced, efficient and substantial contractors, I advocate the general employment of these rather than departmental labour for the completion of the work. By having firm contracts the Government will be in a position to know with more certainty what their liabilities are before the work carried on in the manner advocated is commenced. In the event of adopting this procedure, however, it is essential that the contract particulars and documents should be carefully drawn up by persons experienced in the letting of contracts, otherwise the results may be disappointing.

8. In arriving at the conclusions enumerated, and submitting the recommendations given above, I have considered the best means for dealing only with the situation as it presents itself today. I have purposely avoided the past except where it is irrevocably bound up with the future.

9. As I have already stated it has not been possible in the time available for me to check the accuracy of the figures which have been given for the costs of the work. I have the greatest reluctance in putting forward figures which I have not been able to check throughout and I suggest that it would be expedient to have a concise and reliable scheme drawn up on the lines decided upon with the estimates carefully checked before definitely concluding what the costs will be.

10. The foregoing recommendations are submitted with a view to completing the work in the most efficient, expeditious and economical manner possible and the summary below may serve for a guide as to the cost of carrying them out. The figures do not include the extra amount required for the development of the reclaimed land, nor has consideration been given, when estimating the prices per square yard, to the land reserved for open spaces and roads. In addition nothing has been included in respect of interest as this amount will vary with the time at which it is decided to complete the various Blocks and also will be dependent on the dates of the sales of the land.

SUMMARY.

Completion of reclamation in Block 8 ..	27·50	Lakhs	Rupees.
Completion of reclamation in Blocks 1 & 2..	45·50	,,	,,
Completion of reclamation in Blocks 3 to 7 .	204·00	,,	,,
Completion of Sea Wall, etc. ..	20·50	,,	,,
Contingencies 10 per cent.	29·76	,,	,,
Establishment charges, etc., 10 per cent. ..	32·74	,,	,,
	360·00	,,	,,
Amount estimated to be realised for the Dredging Plant	24·00	,,	,,
	336·00	Lakhs	Rupees.

Dividing the sum of 336 lakhs of Rupees by 1,145 acres gives a cost of 6·06 Rupees per square yard, which is the extra price which it will cost from now on to carry the scheme to completion for undeveloped land. To this amount must

be added a charge for interest and for the development of the land into building blocks. I have abstained from commenting on the value which may be obtained from the land sold or the probable rate of absorption of the land, as these are matters which you are better able to give an opinion on than I am.

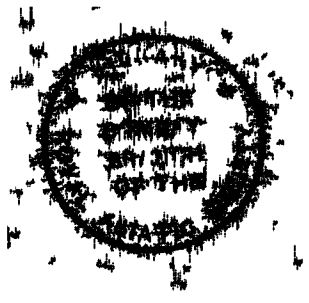
11. In framing this report I have had the advantages of the experiences and collaboration of my partner Mr. Rustat Blake, who prior to joining me was a partner in the late Sir John Wolfe Barry's firm and of the Chief Engineer of our Bombay Office, Mr. Cyril G. Stileman, who was in charge of the Sewri-Mazagon Reclamation whilst he was Deputy Chief Engineer of the Bombay Port Trust and whose local knowledge has been of great service. I would also tender my thanks to you and the members of your staff for the valuable assistance you have rendered to me in so readily placing at my disposal all available documents.

I have the honour to be,

Sir,

Your most obedient servant,

ALEXANDER GIBB.



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